

APPENDIX B

**LABORATORY ANALYTICAL REPORTS
AND CHAIN OF CUSTODY RECORDS**

CDW CONSULTANTS, INC.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

May 31, 2022

Alan Sundquist
CDW Consultants, Inc.
4 California Drive, Suite 301
Framingham, MA 01760

Project Location: 240 Beaver St., Waltham, MA

Client Job Number:

Project Number: 1830.1

Laboratory Work Order Number: 22E0834

Enclosed are results of analyses for samples as received by the laboratory on May 12, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kerry K. McGee
Project Manager

Table of Contents

Sample Summary	4
Case Narrative	5
Sample Results	9
22E0834-01	9
22E0834-02	17
Sample Preparation Information	20
QC Data	22
Volatile Organic Compounds by GC/MS	22
B308386	22
Semivolatile Organic Compounds by GC/MS	27
B308526	27
Organochloride Pesticides by GC/ECD	31
B308354	31
Polychlorinated Biphenyls By GC/ECD	34
B308353	34
Herbicides by GC/ECD	35
B309280	35
Petroleum Hydrocarbons Analyses	37
B308525	37
Metals Analyses (Total)	38
B308621	38
B309067	39
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)	40
B308341	40
B308429	40

Table of Contents (continued)

B308563	40
B308564	40
B308571	40
Pesticides Degradation Report	42
Dual Column RPD Report	45
Flag/Qualifier Summary	54
Certifications	55
Chain of Custody/Sample Receipt	62



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CDW Consultants, Inc.
4 California Drive, Suite 301
Framingham, MA 01760
ATTN: Alan Sundquist

REPORT DATE: 5/31/2022

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 1830.1

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22E0834

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: 240 Beaver St., Waltham, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Comp #1 (2-10ft)	22E0834-01	Soil		SM 2540G SM21-23 2510B Modified SW-846 1010A-B SW-846 6010D SW-846 7471B SW-846 8081B SW-846 8082A SW-846 8100 Modified SW-846 8151A SW-846 8270E SW-846 9014 SW-846 9030A SW-846 9045C SM 2540G SW-846 8260D	
GP 3-5 (4-6ft)	22E0834-02	Soil			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For method 8151 samples were derivatized on 05/27/22.

For method 8151 samples analysis bracketed by LCS to monitor esterification. All recoveries in the bracketing LCS met method criteria.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

SW-846 6010D

Qualifications:

M-10

The reporting limit verification for the AIHA lead program is outside of control limits for this element. Any reported result at or near the detection limit may be biased on the high side.

Analyte & Samples(s) Qualified:

Lead

22E0834-01[Comp #1 (2-10ft)], B308621-SRM1

SW-846 8081B

Qualifications:

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

22E0834-01[Comp #1 (2-10ft)]

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

Decachlorobiphenyl

22E0834-01[Comp #1 (2-10ft)]

Decachlorobiphenyl [2C]

22E0834-01[Comp #1 (2-10ft)]

Tetrachloro-m-xylene

22E0834-01[Comp #1 (2-10ft)]

Tetrachloro-m-xylene [2C]

22E0834-01[Comp #1 (2-10ft)]

SW-846 8082A

Qualifications:

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

Decachlorobiphenyl

22E0834-01[Comp #1 (2-10ft)]

Decachlorobiphenyl [2C]

22E0834-01[Comp #1 (2-10ft)]

Tetrachloro-m-xylene

22E0834-01[Comp #1 (2-10ft)]

Tetrachloro-m-xylene [2C]

22E0834-01[Comp #1 (2-10ft)]

SW-846 8100 Modified

Qualifications:

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

2-Fluorobiphenyl

22E0834-01[Comp #1 (2-10ft)]

SW-846 8151A

Qualifications:

O-32

A dilution was performed as part of the standard analytical procedure.

Analyte & Samples(s) Qualified:

22E0834-01[Comp #1 (2-10ft)]

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

S-12

Surrogate recovery is outside of control limits on confirmatory column, but within control limits on primary column. Data validation is not affected.

Analyte & Samples(s) Qualified:**2,4-Dichlorophenylacetic acid****22E0834-01[Comp #1 (2-10ft)]**

V-06

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.

Analyte & Samples(s) Qualified:**MCPP****B309280-BLK1, B309280-BS1, B309280-BSD1****SW-846 8260D**

Qualifications:**S-17**

Surrogate recovery is outside of control limits. Data validation is not affected since all associated results are less than the reporting limit and bias is on the high side.

Analyte & Samples(s) Qualified:**1,2-Dichloroethane-d4****22E0834-02[GP 3-5 (4-6ft)]**

V-16

Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.

Analyte & Samples(s) Qualified:**1,4-Dioxane****B308386-BSD1**

V-34

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:**Bromomethane****22E0834-02[GP 3-5 (4-6ft)], B308386-BLK1, B308386-BS1, B308386-BSD1, S071520-CCV1**

V-36

Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:**2-Butanone (MEK)****B308386-BS1, B308386-BSD1, S071520-CCV1****2-Hexanone (MBK)****B308386-BS1, B308386-BSD1, S071520-CCV1****SW-846 8270E**

Qualifications:**R-05**

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

Analyte & Samples(s) Qualified:**2,4-Dinitrophenol****22E0834-01[Comp #1 (2-10ft)], B308526-BLK1, B308526-BS1, B308526-BSD1**

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:**Aniline****22E0834-01[Comp #1 (2-10ft)], B308526-BLK1, B308526-BS1, B308526-BSD1, S071740-CCV1****Bis(2-chloroisopropyl)ether****B308526-BLK1, B308526-BS1, B308526-BSD1, S071740-CCV1**



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

V-34

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:

4-Chloroaniline

22E0834-01[Comp #1 (2-10ft)], B308526-BLK1, B308526-BS1, B308526-BSD1, S071740-CCV1

Bis(2-chloroisopropyl)ether

22E0834-01[Comp #1 (2-10ft)]

SW-846 8100 Modified

TPH (C9-C36) is quantitated against a calibration made with a diesel standard.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink, appearing to read "Tod E. Kopyscinski". The signature is fluid and cursive, with some loops and variations in line thickness.

Tod E. Kopyscinski
Laboratory Director

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Biphenyl	ND	4.6	0.36	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Acenaphthene	ND	1.2	0.47	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Acenaphthylene	ND	1.2	0.46	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Acetophenone	ND	2.3	0.45	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Aniline	ND	2.3	0.40	mg/Kg dry	5	V-05	SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Anthracene	ND	1.2	0.47	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Benzo(a)anthracene	ND	1.2	0.41	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Benzo(a)pyrene	ND	1.2	0.40	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Benzo(b)fluoranthene	ND	1.2	0.41	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Benzo(g,h,i)perylene	ND	1.2	0.50	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Benzo(k)fluoranthene	ND	1.2	0.40	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Bis(2-chloroethoxy)methane	ND	2.3	0.44	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Bis(2-chloroethyl)ether	ND	2.3	0.45	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Bis(2-chloroisopropyl)ether	ND	2.3	0.62	mg/Kg dry	5	V-34	SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Bis(2-Ethylhexyl)phthalate	ND	2.3	0.46	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
4-Bromophenylphenylether	ND	2.3	0.43	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Butylbenzylphthalate	ND	2.3	0.42	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
4-Chloroaniline	ND	4.5	0.30	mg/Kg dry	5	V-34	SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2-Chloronaphthalene	ND	2.3	0.40	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2-Chlorophenol	ND	2.3	0.47	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Chrysene	ND	1.2	0.43	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Dibenz(a,h)anthracene	ND	1.2	0.46	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Dibenzofuran	ND	2.3	0.46	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Di-n-butylphthalate	ND	2.3	0.41	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
1,2-Dichlorobenzene	ND	2.3	0.42	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
1,3-Dichlorobenzene	ND	2.3	0.41	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
1,4-Dichlorobenzene	ND	2.3	0.41	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
3,3-Dichlorobenzidine	ND	1.2	0.31	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2,4-Dichlorophenol	ND	2.3	0.45	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Diethylphthalate	ND	2.3	0.43	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2,4-Dimethylphenol	ND	2.3	0.59	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Dimethylphthalate	ND	2.3	0.45	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2,4-Dinitrophenol	ND	4.5	2.0	mg/Kg dry	5	R-05	SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2,4-Dinitrotoluene	ND	2.3	0.48	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2,6-Dinitrotoluene	ND	2.3	0.51	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Di-n-octylphthalate	ND	2.3	0.67	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
1,2-Diphenylhydrazine/Azobenzene	ND	2.3	0.45	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Fluoranthene	ND	1.2	0.43	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Fluorene	ND	1.2	0.47	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Hexachlorobenzene	0.73	2.3	0.45	mg/Kg dry	5	J	SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Hexachlorobutadiene	ND	2.3	0.46	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Hexachloroethane	ND	2.3	0.44	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Indeno(1,2,3-cd)pyrene	ND	1.2	0.52	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Isophorone	ND	2.3	0.47	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylnaphthalene	ND	1.2	0.51	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2-Methylphenol	ND	2.3	0.49	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
3/4-Methylphenol	ND	2.3	0.49	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Naphthalene	ND	1.2	0.46	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Nitrobenzene	ND	2.3	0.47	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2-Nitrophenol	ND	2.3	0.49	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
4-Nitrophenol	ND	4.5	1.0	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Pentachlorophenol	ND	2.3	0.93	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Phenanthrene	ND	1.2	0.47	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Phenol	ND	2.3	0.51	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Pyrene	ND	1.2	0.45	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Pyridine	ND	2.3	0.33	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
1,2,4-Trichlorobenzene	ND	2.3	0.44	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2,4,5-Trichlorophenol	ND	2.3	0.45	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
2,4,6-Trichlorophenol	ND	2.3	0.44	mg/Kg dry	5		SW-846 8270E	5/16/22	5/19/22 0:08	IMR
Surrogates	% Recovery	Recovery Limits			Flag/Qual					
2-Fluorophenol	50.9	30-130								5/19/22 0:08
Phenol-d6	48.4	30-130								5/19/22 0:08
Nitrobenzene-d5	47.5	30-130								5/19/22 0:08
2-Fluorobiphenyl	61.4	30-130								5/19/22 0:08
2,4,6-Tribromophenol	59.8	30-130								5/19/22 0:08
p-Terphenyl-d14	58.1	30-130								5/19/22 0:08

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-01

Sample Matrix: Soil

Sample Flags: RL-11

Organochloride Pesticides by GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aldrin [1]	ND	1.4	0.12	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
alpha-BHC [1]	ND	1.4	0.58	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
beta-BHC [1]	ND	1.4	0.49	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
delta-BHC [1]	ND	1.4	0.66	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
gamma-BHC (Lindane) [1]	ND	0.55	0.13	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Chlordane [1]	ND	5.5	2.1	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
4,4'-DDD [2]	34	1.1	0.099	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
4,4'-DDE [1]	3.2	1.1	0.11	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
4,4'-DDT [1]	1400	110	13	mg/Kg dry	20000		SW-846 8081B	5/13/22	5/22/22 13:57	JMB
Dieldrin [1]	7.8	1.1	0.10	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Endosulfan I [1]	ND	1.4	0.47	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Endosulfan II [1]	ND	2.2	0.47	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Endosulfan sulfate [1]	ND	2.2	0.50	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Endrin [1]	ND	2.2	0.47	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Endrin ketone [1]	ND	2.2	0.61	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Heptachlor [1]	ND	1.4	0.15	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Heptachlor epoxide [1]	ND	1.4	0.12	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Iexachlorobenzene [1]	ND	1.6	0.62	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB
Methoxychlor [1]	ND	14	1.7	mg/Kg dry	200		SW-846 8081B	5/13/22	5/22/22 13:30	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	*	30-150	S-01	5/22/22 13:30
Decachlorobiphenyl [2]	*	30-150	S-01	5/22/22 13:30
Tetrachloro-m-xylene [1]	*	30-150	S-01	5/22/22 13:30
Tetrachloro-m-xylene [2]	*	30-150	S-01	5/22/22 13:30

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-01

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
Aroclor-1221 [1]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
Aroclor-1232 [1]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
Aroclor-1242 [1]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
Aroclor-1248 [1]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
Aroclor-1254 [1]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
Aroclor-1260 [1]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
Aroclor-1262 [1]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
Aroclor-1268 [1]	ND	11	mg/Kg dry	400		SW-846 8082A	5/13/22	5/19/22 8:47	JEA
<hr/>		<hr/>		<hr/>		<hr/>		<hr/>	
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		*	30-150		S-01				5/19/22 8:47
Decachlorobiphenyl [2]		*	30-150		S-01				5/19/22 8:47
Tetrachloro-m-xylene [1]		*	30-150		S-01				5/19/22 8:47
Tetrachloro-m-xylene [2]		*	30-150		S-01				5/19/22 8:47



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-01

Sample Matrix: Soil

Sample Flags: O-32

Herbicides by GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [2]	ND	140	12	µg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
2,4-DB [2]	ND	140	27	µg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
2,4,5-TP (Silvex) [2]	ND	14	1.5	µg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
2,4,5-T [2]	ND	14	1.9	µg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
Dalapon [2]	ND	340	21	µg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
Dicamba [2]	ND	14	1.9	µg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
Dichloroprop [2]	ND	140	26	µg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
MCPA [2]	ND	14000	2100	µg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
MCPP [2]	ND	14000	1800	µg/kg dry	4		SW-846 8151A	5/25/22	5/29/22 10:10	JMB
Surrogates		% Recovery		Recovery Limits		Flag/Qual				
2,4-Dichlorophenylacetic acid [1]	566	*		30-150		S-12		5/29/22 10:10		
2,4-Dichlorophenylacetic acid [2]	101			30-150				5/29/22 10:10		



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-01

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	2600	570	mg/Kg dry	50		SW-846 8100 Modified	5/16/22	5/19/22 0:39	SFM
Surrogates									
2-Fluorobiphenyl	*		40-140			S-01		5/19/22 0:39	



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-01

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.2	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	MJH
Arsenic	9.8	4.4	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	MJH
Barium	82	2.2	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	MJH
Beryllium	0.36	0.22	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	MJH
Cadmium	0.47	0.44	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	MJH
Chromium	24	0.89	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	MJH
Lead	170	0.67	mg/Kg dry	1	M-10	SW-846 6010D	5/17/22	5/21/22 21:41	MJH
Mercury	0.40	0.035	mg/Kg dry	1		SW-846 7471B	5/23/22	5/23/22 18:15	TDK
Nickel	24	0.89	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	MJH
Selenium	ND	4.4	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	MJH
Silver	ND	0.44	mg/Kg dry	1		SW-846 6010D	5/17/22	5/24/22 16:57	MJH
Thallium	ND	2.2	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	MJH
Vanadium	160	0.89	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	MJH
Zinc	160	0.89	mg/Kg dry	1		SW-846 6010D	5/17/22	5/21/22 21:41	MJH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: Comp #1 (2-10ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	73.0		% Wt	1		SM 2540G	5/20/22	5/21/22 10:16	BLS
Flashpoint	> 212 °F		°F	1		SW-846 1010A-B	5/17/22	5/17/22 14:50	DET
pH @20.3°C	7.9		pH Units	1		SW-846 9045C	5/12/22	5/12/22 21:05	JEC
Reactive Cyanide	ND	3.9	mg/Kg	1		SW-846 9014	5/17/22	5/18/22 17:25	EC
Reactive Sulfide	ND	19	mg/Kg	1		SW-846 9030A	5/17/22	5/18/22 16:10	EC
Specific conductance	9.7	2.0	µmhos/cm	1		SM21-23 2510B Modified	5/14/22	5/14/22 13:00	EC

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: GP 3-5 (4-6ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-02

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	0.038	0.14	0.013	mg/Kg dry	1	J	SW-846 8260D	5/13/22	5/13/22 10:35	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.0014	0.00050	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Benzene	0.0011	0.0027	0.00075	mg/Kg dry	1	J	SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Bromobenzene	ND	0.0027	0.00050	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Bromochloromethane	ND	0.0027	0.0012	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Bromodichloromethane	ND	0.0027	0.00067	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Bromoform	ND	0.0027	0.00085	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Bromomethane	ND	0.014	0.0022	mg/Kg dry	1	V-34	SW-846 8260D	5/13/22	5/13/22 10:35	MFF
2-Butanone (MEK)	ND	0.055	0.0078	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
n-Butylbenzene	ND	0.0027	0.00080	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
sec-Butylbenzene	ND	0.0027	0.0013	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
tert-Butylbenzene	ND	0.0027	0.0011	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.0014	0.00068	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Carbon Disulfide	0.017	0.014	0.0096	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Carbon Tetrachloride	ND	0.0027	0.0012	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Chlorobenzene	ND	0.0027	0.00081	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Chlorodibromomethane	ND	0.0014	0.00078	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Chloroethane	ND	0.027	0.0017	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Chloroform	ND	0.0055	0.00080	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Chloromethane	ND	0.014	0.0014	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
2-Chlorotoluene	ND	0.0027	0.00068	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
4-Chlorotoluene	ND	0.0027	0.00057	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0027	0.0012	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2-Dibromoethane (EDB)	ND	0.0014	0.00092	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Dibromomethane	ND	0.0027	0.0010	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2-Dichlorobenzene	ND	0.0027	0.00060	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,3-Dichlorobenzene	ND	0.0027	0.00068	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,4-Dichlorobenzene	ND	0.0027	0.00073	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.027	0.0014	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,1-Dichloroethane	ND	0.0027	0.00095	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2-Dichloroethane	ND	0.0027	0.00090	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,1-Dichloroethylene	ND	0.0055	0.00097	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
cis-1,2-Dichloroethylene	ND	0.0027	0.00077	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
trans-1,2-Dichloroethylene	ND	0.0027	0.00092	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2-Dichloropropane	ND	0.0027	0.00077	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,3-Dichloropropane	ND	0.0014	0.00071	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
2,2-Dichloropropane	ND	0.0027	0.0011	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,1-Dichloropropene	ND	0.0027	0.0013	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
cis-1,3-Dichloropropene	ND	0.0014	0.00069	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
trans-1,3-Dichloropropene	ND	0.0014	0.00068	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Diethyl Ether	ND	0.027	0.00098	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Diisopropyl Ether (DIPE)	ND	0.0014	0.00078	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,4-Dioxane	ND	0.14	0.049	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Ethylbenzene	ND	0.0027	0.00074	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: GP 3-5 (4-6ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-02

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.0027	0.0010	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
2-Hexanone (MBK)	ND	0.027	0.0078	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Isopropylbenzene (Cumene)	ND	0.0027	0.00097	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0027	0.00077	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0055	0.00049	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Methylene Chloride	ND	0.027	0.0020	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
4-Methyl 2-pentanone (MIBK)	ND	0.027	0.0057	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Naphthalene	ND	0.0055	0.00074	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
n-Propylbenzene	ND	0.0027	0.00065	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Styrene	ND	0.0027	0.00057	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,1,1,2-Tetrachloroethane	ND	0.0027	0.00077	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,1,2,2-Tetrachloroethane	ND	0.0014	0.00071	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Tetrachloroethylene	ND	0.0027	0.00091	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Tetrahydrofuran	ND	0.014	0.0046	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Toluene	ND	0.0027	0.00071	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2,3-Trichlorobenzene	ND	0.0027	0.00074	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2,4-Trichlorobenzene	ND	0.0027	0.00066	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,1,1-Trichloroethane	ND	0.0027	0.0011	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,1,2-Trichloroethane	ND	0.0027	0.00063	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Trichloroethylene	ND	0.0027	0.00090	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Trichlorofluoromethane (Freon 11)	ND	0.014	0.00066	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2,3-Trichloropropane	ND	0.0027	0.0014	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,2,4-Trimethylbenzene	ND	0.0027	0.00091	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
1,3,5-Trimethylbenzene	ND	0.0027	0.00072	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Vinyl Chloride	ND	0.014	0.00088	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
m+p Xylene	ND	0.0055	0.0018	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
o-Xylene	ND	0.0027	0.00059	mg/Kg dry	1		SW-846 8260D	5/13/22	5/13/22 10:35	MFF
Surrogates		% Recovery		Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4		134	*	70-130		S-17		5/13/22 10:35		
Toluene-d8		95.2		70-130				5/13/22 10:35		
4-Bromofluorobenzene		90.8		70-130				5/13/22 10:35		

 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 240 Beaver St., Waltham, MA

Sample Description:

Work Order: 22E0834

Date Received: 5/12/2022

Field Sample #: GP 3-5 (4-6ft)

Sampled: 5/12/2022 12:00

Sample ID: 22E0834-02

Sample Matrix: Soil

 Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	73.0		% Wt	1		SM 2540G	5/20/22	5/25/22 12:36	JLC

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data
Prep Method: % Solids Analytical Method: SM 2540G

Lab Number [Field ID]	Batch	Date
22E0834-01 [Comp #1 (2-10ft)]	B308891	05/20/22
22E0834-02 [GP 3-5 (4-6ft)]	B308891	05/20/22

SM21-23 2510B Modified

Lab Number [Field ID]	Batch	Initial [g]	Date
22E0834-01 [Comp #1 (2-10ft)]	B308429	1.00	05/14/22

SW-846 1010A-B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22E0834-01 [Comp #1 (2-10ft)]	B308571	50.0	50.0	05/17/22

Prep Method: SW-846 3050B Analytical Method: SW-846 6010D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22E0834-01 [Comp #1 (2-10ft)]	B308621	1.54	50.0	05/17/22

Prep Method: SW-846 7471 Analytical Method: SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22E0834-01 [Comp #1 (2-10ft)]	B309067	0.581	50.0	05/23/22

Prep Method: SW-846 3546 Analytical Method: SW-846 8081B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22E0834-01 [Comp #1 (2-10ft)]	B308354	10.0	10.0	05/13/22

Prep Method: SW-846 3546 Analytical Method: SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22E0834-01 [Comp #1 (2-10ft)]	B308353	10.0	10.0	05/13/22

Prep Method: SW-846 3546 Analytical Method: SW-846 8100 Modified

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22E0834-01 [Comp #1 (2-10ft)]	B308525	30.0	1.00	05/16/22

Prep Method: SW-846 8151 Analytical Method: SW-846 8151A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
E0834-01 [Comp #1 (2-10ft)]	B309280	20.0	5.00	05/25/22

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: SW-846 5035 Analytical Method: SW-846 8260D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22E0834-02 [GP 3-5 (4-6ft)]	B308386	5.00	10.0	05/13/22

Prep Method: SW-846 3546 Analytical Method: SW-846 8270E

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22E0834-01 [Comp #1 (2-10ft)]	B308526	30.1	1.00	05/16/22

SW-846 9014

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22E0834-01 [Comp #1 (2-10ft)]	B308564	25.7	250	05/17/22

SW-846 9030A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22E0834-01 [Comp #1 (2-10ft)]	B308563	25.7	250	05/17/22

SW-846 9045C

Lab Number [Field ID]	Batch	Initial [g]	Date
22E0834-01 [Comp #1 (2-10ft)]	B308341	20.0	05/12/22

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B308386 - SW-846 5035

Blank (B308386-BLK1)										Prepared & Analyzed: 05/13/22
Acetone	ND	0.10	mg/Kg wet							
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							V-34
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.010	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.020	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
Chlorotoluene	ND	0.0020	mg/Kg wet							
+Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.020	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
ethyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Ethylene Chloride	ND	0.020	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.0040	mg/Kg wet							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B308386 - SW-846 5035

Blank (B308386-BLK1)		Prepared & Analyzed: 05/13/22					
n-Propylbenzene	ND	0.0020	mg/Kg wet				
Styrene	ND	0.0020	mg/Kg wet				
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet				
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet				
Tetrachloroethylene	ND	0.0020	mg/Kg wet				
Tetrahydrofuran	ND	0.010	mg/Kg wet				
Toluene	ND	0.0020	mg/Kg wet				
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet				
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet				
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet				
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet				
Trichloroethylene	ND	0.0020	mg/Kg wet				
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet				
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet				
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet				
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet				
Vinyl Chloride	ND	0.010	mg/Kg wet				
m+p Xylene	ND	0.0040	mg/Kg wet				
o-Xylene	ND	0.0020	mg/Kg wet				
Surrogate: 1,2-Dichloroethane-d4	0.0549		mg/Kg wet	0.0500	110	70-130	
Surrogate: Toluene-d8	0.0488		mg/Kg wet	0.0500	97.6	70-130	
Surrogate: 4-Bromofluorobenzene	0.0486		mg/Kg wet	0.0500	97.3	70-130	

LCS (B308386-BS1)		Prepared & Analyzed: 05/13/22					
Acetone	0.228	0.10	mg/Kg wet	0.200	114	40-160	
tert-Amyl Methyl Ether (TAME)	0.0225	0.0010	mg/Kg wet	0.0200	113	70-130	
Benzene	0.0202	0.0020	mg/Kg wet	0.0200	101	70-130	
Bromobenzene	0.0206	0.0020	mg/Kg wet	0.0200	103	70-130	
Bromochloromethane	0.0210	0.0020	mg/Kg wet	0.0200	105	70-130	
Bromodichloromethane	0.0208	0.0020	mg/Kg wet	0.0200	104	70-130	
Bromoform	0.0210	0.0020	mg/Kg wet	0.0200	105	70-130	
Bromomethane	0.0225	0.010	mg/Kg wet	0.0200	113	40-160	
2-Butanone (MEK)	0.247	0.040	mg/Kg wet	0.200	124	40-160	
n-Butylbenzene	0.0211	0.0020	mg/Kg wet	0.0200	105	70-130	
sec-Butylbenzene	0.0203	0.0020	mg/Kg wet	0.0200	101	70-130	
tert-Butylbenzene	0.0199	0.0020	mg/Kg wet	0.0200	99.3	70-130	
tert-Butyl Ethyl Ether (TBEE)	0.0189	0.0010	mg/Kg wet	0.0200	94.3	70-130	
Carbon Disulfide	0.218	0.010	mg/Kg wet	0.200	109	70-130	
Carbon Tetrachloride	0.0202	0.0020	mg/Kg wet	0.0200	101	70-130	
Chlorobenzene	0.0196	0.0020	mg/Kg wet	0.0200	97.8	70-130	
Chlorodibromomethane	0.0211	0.0010	mg/Kg wet	0.0200	105	70-130	
Chloroethane	0.0212	0.020	mg/Kg wet	0.0200	106	70-130	
Chloroform	0.0206	0.0040	mg/Kg wet	0.0200	103	70-130	
Chloromethane	0.0211	0.010	mg/Kg wet	0.0200	106	40-160	
2-Chlorotoluene	0.0208	0.0020	mg/Kg wet	0.0200	104	70-130	
4-Chlorotoluene	0.0207	0.0020	mg/Kg wet	0.0200	104	70-130	
1,2-Dibromo-3-chloropropane (DBCP)	0.0216	0.0020	mg/Kg wet	0.0200	108	70-130	
1,2-Dibromoethane (EDB)	0.0208	0.0010	mg/Kg wet	0.0200	104	70-130	
Bromomethane	0.0211	0.0020	mg/Kg wet	0.0200	106	70-130	
1,2-Dichlorobenzene	0.0198	0.0020	mg/Kg wet	0.0200	98.9	70-130	
1,3-Dichlorobenzene	0.0196	0.0020	mg/Kg wet	0.0200	97.8	70-130	
1,4-Dichlorobenzene	0.0193	0.0020	mg/Kg wet	0.0200	96.5	70-130	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD Limit	Notes
Batch B308386 - SW-846 5035									
LCS (B308386-BS1)									
Prepared & Analyzed: 05/13/22									
Dichlorodifluoromethane (Freon 12)	0.0176	0.020	mg/Kg wet	0.0200	88.1	40-160		J	†
1,1-Dichloroethane	0.0209	0.0020	mg/Kg wet	0.0200	105	70-130			
1,2-Dichloroethane	0.0203	0.0020	mg/Kg wet	0.0200	102	70-130			
1,1-Dichloroethylene	0.0207	0.0040	mg/Kg wet	0.0200	103	70-130			
cis-1,2-Dichloroethylene	0.0199	0.0020	mg/Kg wet	0.0200	99.6	70-130			
trans-1,2-Dichloroethylene	0.0210	0.0020	mg/Kg wet	0.0200	105	70-130			
1,2-Dichloropropane	0.0214	0.0020	mg/Kg wet	0.0200	107	70-130			
1,3-Dichloropropane	0.0211	0.0010	mg/Kg wet	0.0200	105	70-130			
2,2-Dichloropropane	0.0202	0.0020	mg/Kg wet	0.0200	101	70-130			
1,1-Dichloropropene	0.0201	0.0020	mg/Kg wet	0.0200	100	70-130			
cis-1,3-Dichloropropene	0.0210	0.0010	mg/Kg wet	0.0200	105	70-130			
trans-1,3-Dichloropropene	0.0185	0.0010	mg/Kg wet	0.0200	92.6	70-130			
Diethyl Ether	0.0199	0.020	mg/Kg wet	0.0200	99.5	70-130		J	
Diisopropyl Ether (DIPE)	0.0201	0.0010	mg/Kg wet	0.0200	101	70-130			
1,4-Dioxane	0.200	0.10	mg/Kg wet	0.200	100	40-160			†
Ethylbenzene	0.0204	0.0020	mg/Kg wet	0.0200	102	70-130			
Hexachlorobutadiene	0.0189	0.0020	mg/Kg wet	0.0200	94.5	70-130			
2-Hexanone (MBK)	0.242	0.020	mg/Kg wet	0.200	121	40-160	V-36		†
Isopropylbenzene (Cumene)	0.0202	0.0020	mg/Kg wet	0.0200	101	70-130			
p-Isopropyltoluene (p-Cymene)	0.0205	0.0020	mg/Kg wet	0.0200	102	70-130			
ethyl tert-Butyl Ether (MTBE)	0.0199	0.0040	mg/Kg wet	0.0200	99.4	70-130			
Methylene Chloride	0.0200	0.020	mg/Kg wet	0.0200	100	70-130			
4-Methyl-2-pentanone (MIBK)	0.235	0.020	mg/Kg wet	0.200	118	40-160			†
Naphthalene	0.0206	0.0040	mg/Kg wet	0.0200	103	70-130			
n-Propylbenzene	0.0207	0.0020	mg/Kg wet	0.0200	103	70-130			
Styrene	0.0210	0.0020	mg/Kg wet	0.0200	105	70-130			
1,1,1,2-Tetrachloroethane	0.0205	0.0020	mg/Kg wet	0.0200	103	70-130			
1,1,2,2-Tetrachloroethane	0.0210	0.0010	mg/Kg wet	0.0200	105	70-130			
Tetrachloroethylene	0.0198	0.0020	mg/Kg wet	0.0200	99.1	70-130			
Tetrahydrofuran	0.0205	0.010	mg/Kg wet	0.0200	102	70-130			
Toluene	0.0204	0.0020	mg/Kg wet	0.0200	102	70-130			
1,2,3-Trichlorobenzene	0.0187	0.0020	mg/Kg wet	0.0200	93.5	70-130			
1,2,4-Trichlorobenzene	0.0182	0.0020	mg/Kg wet	0.0200	90.8	70-130			
1,1,1-Trichloroethane	0.0215	0.0020	mg/Kg wet	0.0200	108	70-130			
1,1,2-Trichloroethane	0.0203	0.0020	mg/Kg wet	0.0200	102	70-130			
Trichloroethylene	0.0201	0.0020	mg/Kg wet	0.0200	100	70-130			
Trichlorofluoromethane (Freon 11)	0.0218	0.010	mg/Kg wet	0.0200	109	70-130			
1,2,3-Trichloropropane	0.0211	0.0020	mg/Kg wet	0.0200	106	70-130			
1,2,4-Trimethylbenzene	0.0206	0.0020	mg/Kg wet	0.0200	103	70-130			
1,3,5-Trimethylbenzene	0.0207	0.0020	mg/Kg wet	0.0200	103	70-130			
Vinyl Chloride	0.0214	0.010	mg/Kg wet	0.0200	107	70-130			
m+p Xylene	0.0420	0.0040	mg/Kg wet	0.0400	105	70-130			
o-Xylene	0.0205	0.0020	mg/Kg wet	0.0200	102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0505		mg/Kg wet	0.0500	101	70-130			
Surrogate: Toluene-d8	0.0506		mg/Kg wet	0.0500	101	70-130			
Surrogate: 4-Bromofluorobenzene	0.0488		mg/Kg wet	0.0500	97.6	70-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B308386 - SW-846 5035										
LCS Dup (B308386-BSD1)										
Prepared & Analyzed: 05/13/22										
Acetone	0.229	0.10	mg/Kg wet	0.200	115	40-160	0.534	20		†
tert-Amyl Methyl Ether (TAME)	0.0227	0.0010	mg/Kg wet	0.0200	114	70-130	0.972	20		
Benzene	0.0201	0.0020	mg/Kg wet	0.0200	100	70-130	0.794	20		
Bromobenzene	0.0208	0.0020	mg/Kg wet	0.0200	104	70-130	0.964	20		
Bromochloromethane	0.0210	0.0020	mg/Kg wet	0.0200	105	70-130	0.00	20		
Bromodichloromethane	0.0210	0.0020	mg/Kg wet	0.0200	105	70-130	1.34	20		
Bromoform	0.0214	0.0020	mg/Kg wet	0.0200	107	70-130	1.89	20		
Bromomethane	0.0223	0.010	mg/Kg wet	0.0200	112	40-160	0.891	20	V-34	†
2-Butanone (MEK)	0.254	0.040	mg/Kg wet	0.200	127	40-160	2.83	20	V-36	†
n-Butylbenzene	0.0209	0.0020	mg/Kg wet	0.0200	105	70-130	0.571	20		
sec-Butylbenzene	0.0202	0.0020	mg/Kg wet	0.0200	101	70-130	0.495	20		
tert-Butylbenzene	0.0201	0.0020	mg/Kg wet	0.0200	101	70-130	1.40	20		
tert-Butyl Ethyl Ether (TBEE)	0.0185	0.0010	mg/Kg wet	0.0200	92.6	70-130	1.82	20		
Carbon Disulfide	0.214	0.010	mg/Kg wet	0.200	107	70-130	2.06	20		
Carbon Tetrachloride	0.0201	0.0020	mg/Kg wet	0.0200	100	70-130	0.497	20		
Chlorobenzene	0.0197	0.0020	mg/Kg wet	0.0200	98.6	70-130	0.815	20		
Chlorodibromomethane	0.0210	0.0010	mg/Kg wet	0.0200	105	70-130	0.0950	20		
Chloroethane	0.0210	0.020	mg/Kg wet	0.0200	105	70-130	0.853	20		
Chloroform	0.0205	0.0040	mg/Kg wet	0.0200	102	70-130	0.487	20		
Chloromethane	0.0208	0.010	mg/Kg wet	0.0200	104	40-160	1.53	20		†
Chlorotoluene	0.0209	0.0020	mg/Kg wet	0.0200	104	70-130	0.481	20		
4-Chlorotoluene	0.0207	0.0020	mg/Kg wet	0.0200	104	70-130	0.0966	20		
1,2-Dibromo-3-chloropropane (DBCP)	0.0218	0.0020	mg/Kg wet	0.0200	109	70-130	1.10	20		
1,2-Dibromoethane (EDB)	0.0209	0.0010	mg/Kg wet	0.0200	104	70-130	0.288	20		
Dibromomethane	0.0215	0.0020	mg/Kg wet	0.0200	107	70-130	1.60	20		
1,2-Dichlorobenzene	0.0198	0.0020	mg/Kg wet	0.0200	98.8	70-130	0.101	20		
1,3-Dichlorobenzene	0.0194	0.0020	mg/Kg wet	0.0200	97.0	70-130	0.821	20		
1,4-Dichlorobenzene	0.0193	0.0020	mg/Kg wet	0.0200	96.4	70-130	0.104	20		
Dichlorodifluoromethane (Freon 12)	0.0174	0.020	mg/Kg wet	0.0200	87.2	40-160	1.03	20	J	†
1,1-Dichloroethane	0.0209	0.0020	mg/Kg wet	0.0200	105	70-130	0.0956	20		
1,2-Dichloroethane	0.0202	0.0020	mg/Kg wet	0.0200	101	70-130	0.494	20		
1,1-Dichloroethylene	0.0204	0.0040	mg/Kg wet	0.0200	102	70-130	1.07	20		
cis-1,2-Dichloroethylene	0.0197	0.0020	mg/Kg wet	0.0200	98.4	70-130	1.21	20		
trans-1,2-Dichloroethylene	0.0203	0.0020	mg/Kg wet	0.0200	102	70-130	3.48	20		
1,2-Dichloropropane	0.0217	0.0020	mg/Kg wet	0.0200	109	70-130	1.48	20		
1,3-Dichloropropane	0.0213	0.0010	mg/Kg wet	0.0200	107	70-130	1.32	20		
2,2-Dichloropropane	0.0194	0.0020	mg/Kg wet	0.0200	97.0	70-130	4.24	20		
1,1-Dichloropropene	0.0198	0.0020	mg/Kg wet	0.0200	99.1	70-130	1.30	20		
cis-1,3-Dichloropropene	0.0211	0.0010	mg/Kg wet	0.0200	106	70-130	0.380	20		
trans-1,3-Dichloropropene	0.0186	0.0010	mg/Kg wet	0.0200	93.0	70-130	0.431	20		
Diethyl Ether	0.0200	0.020	mg/Kg wet	0.0200	100	70-130	0.701	20		
Diisopropyl Ether (DIPE)	0.0197	0.0010	mg/Kg wet	0.0200	98.7	70-130	1.91	20		
1,4-Dioxane	0.236	0.10	mg/Kg wet	0.200	118	40-160	16.2	20	V-16	†
Ethylbenzene	0.0205	0.0020	mg/Kg wet	0.0200	102	70-130	0.587	20		
Hexachlorobutadiene	0.0185	0.0020	mg/Kg wet	0.0200	92.3	70-130	2.36	20		
2-Hexanone (MBK)	0.247	0.020	mg/Kg wet	0.200	123	40-160	2.04	20	V-36	†
Isopropylbenzene (Cumene)	0.0202	0.0020	mg/Kg wet	0.0200	101	70-130	0.0992	20		
p-Isopropyltoluene (p-Cymene)	0.0201	0.0020	mg/Kg wet	0.0200	101	70-130	1.68	20		
ethyl tert-Butyl Ether (MTBE)	0.0198	0.0040	mg/Kg wet	0.0200	99.2	70-130	0.201	20		
Methylene Chloride	0.0199	0.020	mg/Kg wet	0.0200	99.5	70-130	0.501	20	J	
4-Methyl-2-pentanone (MIBK)	0.240	0.020	mg/Kg wet	0.200	120	40-160	2.20	20		†
Naphthalene	0.0205	0.0040	mg/Kg wet	0.0200	102	70-130	0.584	20		

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Notes
Batch B308386 - SW-846 5035									
LCS Dup (B308386-BSD1)									
Prepared & Analyzed: 05/13/22									
n-Propylbenzene	0.0207	0.0020	mg/Kg wet	0.0200	104	70-130	0.290	20	
Styrene	0.0211	0.0020	mg/Kg wet	0.0200	105	70-130	0.381	20	
1,1,1,2-Tetrachloroethane	0.0207	0.0020	mg/Kg wet	0.0200	104	70-130	0.970	20	
1,1,2,2-Tetrachloroethane	0.0216	0.0010	mg/Kg wet	0.0200	108	70-130	3.19	20	
Tetrachloroethylene	0.0195	0.0020	mg/Kg wet	0.0200	97.7	70-130	1.42	20	
Tetrahydrofuran	0.0206	0.010	mg/Kg wet	0.0200	103	70-130	0.682	20	
Toluene	0.0226	0.0020	mg/Kg wet	0.0200	113	70-130	10.1	20	
1,2,3-Trichlorobenzene	0.0186	0.0020	mg/Kg wet	0.0200	93.0	70-130	0.536	20	
1,2,4-Trichlorobenzene	0.0180	0.0020	mg/Kg wet	0.0200	89.9	70-130	0.996	20	
1,1,1-Trichloroethane	0.0212	0.0020	mg/Kg wet	0.0200	106	70-130	1.50	20	
1,1,2-Trichloroethane	0.0206	0.0020	mg/Kg wet	0.0200	103	70-130	1.66	20	
Trichloroethylene	0.0199	0.0020	mg/Kg wet	0.0200	99.6	70-130	0.800	20	
Trichlorofluoromethane (Freon 11)	0.0219	0.010	mg/Kg wet	0.0200	109	70-130	0.550	20	
1,2,3-Trichloropropane	0.0215	0.0020	mg/Kg wet	0.0200	108	70-130	1.87	20	
1,2,4-Trimethylbenzene	0.0202	0.0020	mg/Kg wet	0.0200	101	70-130	1.86	20	
1,3,5-Trimethylbenzene	0.0208	0.0020	mg/Kg wet	0.0200	104	70-130	0.675	20	
Vinyl Chloride	0.0212	0.010	mg/Kg wet	0.0200	106	70-130	0.563	20	
m+p Xylene	0.0420	0.0040	mg/Kg wet	0.0400	105	70-130	0.143	20	
o-Xylene	0.0205	0.0020	mg/Kg wet	0.0200	102	70-130	0.195	20	
Surrogate: 1,2-Dichloroethane-d4	0.0495		mg/Kg wet	0.0500	99.0	70-130			
Surrogate: Toluene-d8	0.0503		mg/Kg wet	0.0500	101	70-130			
Surrogate: 4-Bromofluorobenzene	0.0489		mg/Kg wet	0.0500	97.9	70-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B308526 - SW-846 3546

Blank (B308526-BLK1)										Prepared: 05/16/22 Analyzed: 05/18/22
Biphenyl	ND	0.67	mg/Kg wet							
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.34	mg/Kg wet							
Aniline	ND	0.34	mg/Kg wet							V-05
Anthracene	ND	0.17	mg/Kg wet							
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							V-05
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
4-Bromophenylphenylether	ND	0.34	mg/Kg wet							
Butylbenzylphthalate	ND	0.34	mg/Kg wet							
4-Chloroaniline	ND	0.66	mg/Kg wet							V-34
2-Chloronaphthalene	ND	0.34	mg/Kg wet							
2-Chlorophenol	ND	0.34	mg/Kg wet							
Phenylacetylene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Dibenzo-furan	ND	0.34	mg/Kg wet							
Di-n-butylphthalate	ND	0.34	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.34	mg/Kg wet							
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND	0.34	mg/Kg wet							
Diethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dimethylphenol	ND	0.34	mg/Kg wet							
Dimethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dinitrophenol	ND	0.66	mg/Kg wet							R-05
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet							
Di-n-octylphthalate	ND	0.34	mg/Kg wet							
1,2-Diphenylhydrazine/Azobenzene	ND	0.34	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Hexachlorobenzene	ND	0.34	mg/Kg wet							
Hexachlorobutadiene	ND	0.34	mg/Kg wet							
Hexachloroethane	ND	0.34	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
Isophorone	ND	0.34	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							
2-Methylphenol	ND	0.34	mg/Kg wet							
3/4-Methylphenol	ND	0.34	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
Trobenzene	ND	0.34	mg/Kg wet							
Nitrophenol	ND	0.34	mg/Kg wet							
4-Nitrophenol	ND	0.66	mg/Kg wet							
Pentachlorophenol	ND	0.34	mg/Kg wet							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL**Semivolatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
Batch B308526 - SW-846 3546										
Blank (B308526-BLK1)										
Prepared: 05/16/22 Analyzed: 05/18/22										
Phenanthrene	ND	0.17	mg/Kg wet							
Phenol	ND	0.34	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							
Pyridine	ND	0.34	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.34	mg/Kg wet							
2,4,5-Trichlorophenol	ND	0.34	mg/Kg wet							
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
Surrogate: 2-Fluorophenol	3.57		mg/Kg wet	6.67		53.5	30-130			
Surrogate: Phenol-d6	3.50		mg/Kg wet	6.67		52.5	30-130			
Surrogate: Nitrobenzene-d5	1.76		mg/Kg wet	3.33		52.8	30-130			
Surrogate: 2-Fluorobiphenyl	2.31		mg/Kg wet	3.33		69.2	30-130			
Surrogate: 2,4,6-Tribromophenol	4.96		mg/Kg wet	6.67		74.4	30-130			
Surrogate: p-Terphenyl-d14	2.09		mg/Kg wet	3.33		62.8	30-130			
LCS (B308526-BS1)										
Prepared: 05/16/22 Analyzed: 05/18/22										
Biphenyl	1.15	0.67	mg/Kg wet	1.67		69.3	40-140			
Acenaphthene	1.02	0.17	mg/Kg wet	1.67		61.1	40-140			
Acenaphthylene	1.06	0.17	mg/Kg wet	1.67		63.8	40-140			
Acetophenone	0.935	0.34	mg/Kg wet	1.67		56.1	40-140			
Aniline	0.822	0.34	mg/Kg wet	1.67		49.3	40-140			
Anthracene	1.15	0.17	mg/Kg wet	1.67		69.1	40-140			
Anthracene	1.09	0.17	mg/Kg wet	1.67		65.5	40-140			
Benzo(a)pyrene	1.13	0.17	mg/Kg wet	1.67		68.1	40-140			
Benzo(b)fluoranthene	1.16	0.17	mg/Kg wet	1.67		69.3	40-140			
Benzo(g,h,i)perylene	1.11	0.17	mg/Kg wet	1.67		66.9	40-140			
Benzo(k)fluoranthene	1.26	0.17	mg/Kg wet	1.67		75.6	40-140			
Bis(2-chloroethoxy)methane	0.958	0.34	mg/Kg wet	1.67		57.5	40-140			
Bis(2-chloroethyl)ether	0.727	0.34	mg/Kg wet	1.67		43.6	40-140			
Bis(2-chloroisopropyl)ether	0.713	0.34	mg/Kg wet	1.67		42.8	40-140			V-05
Bis(2-Ethylhexyl)phthalate	0.998	0.34	mg/Kg wet	1.67		59.9	40-140			
4-Bromophenylphenylether	1.17	0.34	mg/Kg wet	1.67		70.5	40-140			
Butylbenzylphthalate	0.946	0.34	mg/Kg wet	1.67		56.8	40-140			
4-Chloroaniline	0.941	0.66	mg/Kg wet	1.67		56.5	15-140			V-34 †
2-Chloronaphthalene	0.955	0.34	mg/Kg wet	1.67		57.3	40-140			
2-Chlorophenol	0.943	0.34	mg/Kg wet	1.67		56.6	30-130			
Chrysene	1.12	0.17	mg/Kg wet	1.67		67.2	40-140			
Dibenz(a,h)anthracene	1.14	0.17	mg/Kg wet	1.67		68.5	40-140			
Dibenzo-furan	1.19	0.34	mg/Kg wet	1.67		71.2	40-140			
Di-n-butylphthalate	1.00	0.34	mg/Kg wet	1.67		60.0	40-140			
1,2-Dichlorobenzene	0.935	0.34	mg/Kg wet	1.67		56.1	40-140			
1,3-Dichlorobenzene	0.901	0.34	mg/Kg wet	1.67		54.1	40-140			
1,4-Dichlorobenzene	0.926	0.34	mg/Kg wet	1.67		55.6	40-140			
3,3-Dichlorobenzidine	0.961	0.17	mg/Kg wet	1.67		57.7	40-140			
2,4-Dichlorophenol	1.07	0.34	mg/Kg wet	1.67		64.4	30-130			
Diethylphthalate	0.965	0.34	mg/Kg wet	1.67		57.9	40-140			
2,4-Dimethylphenol	1.02	0.34	mg/Kg wet	1.67		61.4	30-130			
Dimethylphthalate	1.06	0.34	mg/Kg wet	1.67		63.7	40-140			
2,4-Dinitrophenol	0.572	0.66	mg/Kg wet	1.67		34.3	15-140			R-05, J †
2,4-Dinitrotoluene	1.16	0.34	mg/Kg wet	1.67		69.4	40-140			
-Dinitrotoluene	1.20	0.34	mg/Kg wet	1.67		71.9	40-140			
Di-n-octylphthalate	0.958	0.34	mg/Kg wet	1.67		57.5	40-140			
1,2-Diphenylhydrazine/Azobenzene	0.964	0.34	mg/Kg wet	1.67		57.8	40-140			



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B308526 - SW-846 3546										
LCS (B308526-BS1)										
Prepared: 05/16/22 Analyzed: 05/18/22										
Fluoranthene	1.11	0.17	mg/Kg wet	1.67		66.4	40-140			
Fluorene	1.15	0.17	mg/Kg wet	1.67		69.1	40-140			
Hexachlorobenzene	1.24	0.34	mg/Kg wet	1.67		74.1	40-140			
Hexachlorobutadiene	1.08	0.34	mg/Kg wet	1.67		64.9	40-140			
Hexachloroethane	0.828	0.34	mg/Kg wet	1.67		49.7	40-140			
Indeno(1,2,3-cd)pyrene	1.15	0.17	mg/Kg wet	1.67		68.8	40-140			
Isophorone	0.962	0.34	mg/Kg wet	1.67		57.7	40-140			
2-Methylnaphthalene	1.17	0.17	mg/Kg wet	1.67		70.1	40-140			
2-Methylphenol	0.972	0.34	mg/Kg wet	1.67		58.3	30-130			
3/4-Methylphenol	0.990	0.34	mg/Kg wet	1.67		59.4	30-130			
Naphthalene	1.02	0.17	mg/Kg wet	1.67		61.3	40-140			
Nitrobenzene	0.872	0.34	mg/Kg wet	1.67		52.3	40-140			
2-Nitrophenol	0.978	0.34	mg/Kg wet	1.67		58.7	30-130			
4-Nitrophenol	0.907	0.66	mg/Kg wet	1.67		54.4	15-140			†
Pentachlorophenol	0.917	0.34	mg/Kg wet	1.67		55.0	30-130			
Phenanthrene	1.15	0.17	mg/Kg wet	1.67		68.9	40-140			
Phenol	0.918	0.34	mg/Kg wet	1.67		55.1	15-140			†
Pyrene	1.07	0.17	mg/Kg wet	1.67		64.1	40-140			
Pyridine	0.514	0.34	mg/Kg wet	1.67		30.9	30-140			†
,2,4-Trichlorobenzene	1.05	0.34	mg/Kg wet	1.67		63.1	40-140			
,5-Trichlorophenol	1.17	0.34	mg/Kg wet	1.67		70.1	30-130			
2,4,6-Trichlorophenol	1.13	0.34	mg/Kg wet	1.67		67.7	30-130			
Surrogate: 2-Fluorophenol	4.20		mg/Kg wet	6.67		62.9	30-130			
Surrogate: Phenol-d6	4.14		mg/Kg wet	6.67		62.1	30-130			
Surrogate: Nitrobenzene-d5	1.86		mg/Kg wet	3.33		55.7	30-130			
Surrogate: 2-Fluorobiphenyl	2.49		mg/Kg wet	3.33		74.8	30-130			
Surrogate: 2,4,6-Tribromophenol	5.52		mg/Kg wet	6.67		82.9	30-130			
Surrogate: p-Terphenyl-d14	2.34		mg/Kg wet	3.33		70.2	30-130			
LCS Dup (B308526-BSD1)										
Prepared: 05/16/22 Analyzed: 05/18/22										
Biphenyl	1.21	0.67	mg/Kg wet	1.67		72.5	40-140	4.54	20	
Acenaphthene	1.05	0.17	mg/Kg wet	1.67		63.3	40-140	3.57	30	
Acenaphthylene	1.09	0.17	mg/Kg wet	1.67		65.2	40-140	2.26	30	
Acetophenone	1.02	0.34	mg/Kg wet	1.67		61.0	40-140	8.33	30	
Aniline	0.745	0.34	mg/Kg wet	1.67		44.7	40-140	9.83	30	V-05
Anthracene	1.17	0.17	mg/Kg wet	1.67		70.3	40-140	1.78	30	
Benzo(a)anthracene	1.11	0.17	mg/Kg wet	1.67		66.5	40-140	1.52	30	
Benzo(a)pyrene	1.13	0.17	mg/Kg wet	1.67		67.7	40-140	0.560	30	
Benzo(b)fluoranthene	1.16	0.17	mg/Kg wet	1.67		69.7	40-140	0.604	30	
Benzo(g,h,i)perylene	1.15	0.17	mg/Kg wet	1.67		69.2	40-140	3.35	30	
Benzo(k)fluoranthene	1.25	0.17	mg/Kg wet	1.67		74.8	40-140	1.06	30	
Bis(2-chloroethoxy)methane	1.00	0.34	mg/Kg wet	1.67		60.3	40-140	4.72	30	
Bis(2-chloroethyl)ether	0.799	0.34	mg/Kg wet	1.67		47.9	40-140	9.44	30	
Bis(2-chloroisopropyl)ether	0.829	0.34	mg/Kg wet	1.67		49.7	40-140	15.0	30	V-05
Bis(2-Ethylhexyl)phthalate	1.05	0.34	mg/Kg wet	1.67		63.3	40-140	5.55	30	
4-Bromophenylphenylether	1.19	0.34	mg/Kg wet	1.67		71.5	40-140	1.52	30	
Butylbenzylphthalate	0.937	0.34	mg/Kg wet	1.67		56.2	40-140	1.03	30	
4-Chloroaniline	0.869	0.66	mg/Kg wet	1.67		52.1	15-140	7.96	30	V-34
Chloronaphthalene	1.01	0.34	mg/Kg wet	1.67		60.8	40-140	5.86	30	
-Chlorophenol	0.995	0.34	mg/Kg wet	1.67		59.7	30-130	5.37	30	
Chrysene	1.15	0.17	mg/Kg wet	1.67		68.8	40-140	2.32	30	
Dibenz(a,h)anthracene	1.13	0.17	mg/Kg wet	1.67		67.6	40-140	1.38	30	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL**Semivolatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B308526 - SW-846 3546										
LCS Dup (B308526-BSD1)										
Prepared: 05/16/22 Analyzed: 05/18/22										
Dibenzofuran	1.21	0.34	mg/Kg wet	1.67	72.8	40-140	2.25	30		
Di-n-butylphthalate	1.06	0.34	mg/Kg wet	1.67	63.3	40-140	5.42	30		
1,2-Dichlorobenzene	1.02	0.34	mg/Kg wet	1.67	61.0	40-140	8.40	30		
1,3-Dichlorobenzene	1.01	0.34	mg/Kg wet	1.67	60.4	40-140	11.1	30		
1,4-Dichlorobenzene	1.02	0.34	mg/Kg wet	1.67	60.9	40-140	9.17	30		
3,3-Dichlorobenzidine	0.867	0.17	mg/Kg wet	1.67	52.0	40-140	10.3	30		
2,4-Dichlorophenol	1.09	0.34	mg/Kg wet	1.67	65.4	30-130	1.54	30		
Diethylphthalate	1.01	0.34	mg/Kg wet	1.67	60.5	40-140	4.46	30		
2,4-Dimethylphenol	1.06	0.34	mg/Kg wet	1.67	63.5	30-130	3.36	30		
Dimethylphthalate	1.05	0.34	mg/Kg wet	1.67	63.1	40-140	0.977	30		
2,4-Dinitrophenol	0.367	0.66	mg/Kg wet	1.67	22.0	15-140	43.6 *	30	R-05, J	†
2,4-Dinitrotoluene	1.17	0.34	mg/Kg wet	1.67	70.4	40-140	1.37	30		
2,6-Dinitrotoluene	1.20	0.34	mg/Kg wet	1.67	72.0	40-140	0.167	30		
Di-n-octylphthalate	0.985	0.34	mg/Kg wet	1.67	59.1	40-140	2.71	30		
1,2-Diphenylhydrazine/Azobenzene	1.00	0.34	mg/Kg wet	1.67	60.2	40-140	4.03	30		
Fluoranthene	1.16	0.17	mg/Kg wet	1.67	69.6	40-140	4.73	30		
Fluorene	1.18	0.17	mg/Kg wet	1.67	70.7	40-140	2.23	30		
Hexachlorobenzene	1.24	0.34	mg/Kg wet	1.67	74.6	40-140	0.699	30		
Hexachlorobutadiene	1.15	0.34	mg/Kg wet	1.67	68.9	40-140	6.01	30		
Hexachloroethane	0.958	0.34	mg/Kg wet	1.67	57.5	40-140	14.6	30		
deno(1,2,3-cd)pyrene	1.11	0.17	mg/Kg wet	1.67	66.5	40-140	3.40	30		
sophorone	1.08	0.34	mg/Kg wet	1.67	64.5	40-140	11.2	30		
2-Methylnaphthalene	1.24	0.17	mg/Kg wet	1.67	74.1	40-140	5.49	30		
2-Methylphenol	1.03	0.34	mg/Kg wet	1.67	61.9	30-130	5.89	30		
3/4-Methylphenol	1.01	0.34	mg/Kg wet	1.67	60.9	30-130	2.46	30		
Naphthalene	1.09	0.17	mg/Kg wet	1.67	65.5	40-140	6.56	30		
Nitrobenzene	0.969	0.34	mg/Kg wet	1.67	58.1	40-140	10.5	30		
2-Nitrophenol	1.07	0.34	mg/Kg wet	1.67	63.9	30-130	8.61	30		
4-Nitrophenol	0.904	0.66	mg/Kg wet	1.67	54.3	15-140	0.258	30		†
Pentachlorophenol	0.924	0.34	mg/Kg wet	1.67	55.4	30-130	0.760	30		
Phenanthrene	1.17	0.17	mg/Kg wet	1.67	70.2	40-140	1.75	30		
Phenol	0.952	0.34	mg/Kg wet	1.67	57.1	15-140	3.64	30		†
Pyrene	1.11	0.17	mg/Kg wet	1.67	66.7	40-140	4.07	30		
Pyridine	0.667	0.34	mg/Kg wet	1.67	40.0	30-140	25.8	30		†
1,2,4-Trichlorobenzene	1.14	0.34	mg/Kg wet	1.67	68.6	40-140	8.29	30		
2,4,5-Trichlorophenol	1.17	0.34	mg/Kg wet	1.67	70.5	30-130	0.455	30		
2,4,6-Trichlorophenol	1.14	0.34	mg/Kg wet	1.67	68.6	30-130	1.35	30		
Surrogate: 2-Fluorophenol	4.36		mg/Kg wet	6.67	65.4	30-130				
Surrogate: Phenol-d6	4.26		mg/Kg wet	6.67	63.8	30-130				
Surrogate: Nitrobenzene-d5	2.08		mg/Kg wet	3.33	62.5	30-130				
Surrogate: 2-Fluorobiphenyl	2.55		mg/Kg wet	3.33	76.6	30-130				
Surrogate: 2,4,6-Tribromophenol	5.38		mg/Kg wet	6.67	80.8	30-130				
Surrogate: p-Terphenyl-d14	2.34		mg/Kg wet	3.33	70.3	30-130				

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL**Organochloride Pesticides by GC/ECD - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B308354 - SW-846 3546

Blank (B308354-BLK1)					Prepared: 05/13/22	Analyzed: 05/18/22				
Aldrin	ND	0.0050	mg/Kg wet							
Aldrin [2C]	ND	0.0050	mg/Kg wet							
alpha-BHC	ND	0.0050	mg/Kg wet							
alpha-BHC [2C]	ND	0.0050	mg/Kg wet							
beta-BHC	ND	0.0050	mg/Kg wet							
beta-BHC [2C]	ND	0.0050	mg/Kg wet							
delta-BHC	ND	0.0050	mg/Kg wet							
delta-BHC [2C]	ND	0.0050	mg/Kg wet							
gamma-BHC (Lindane)	ND	0.0020	mg/Kg wet							
gamma-BHC (Lindane) [2C]	ND	0.0020	mg/Kg wet							
Chlordane	ND	0.020	mg/Kg wet							
Chlordane [2C]	ND	0.020	mg/Kg wet							
4,4'-DDD	ND	0.0040	mg/Kg wet							
4,4'-DDD [2C]	ND	0.0040	mg/Kg wet							
4,4'-DDE	ND	0.0040	mg/Kg wet							
4,4'-DDE [2C]	ND	0.0040	mg/Kg wet							
4,4'-DDT	ND	0.0040	mg/Kg wet							
4,4'-DDT [2C]	ND	0.0040	mg/Kg wet							
Dieldrin	ND	0.0040	mg/Kg wet							
Dieldrin [2C]	ND	0.0040	mg/Kg wet							
dosulfan I	ND	0.0050	mg/Kg wet							
endosulfan I [2C]	ND	0.0050	mg/Kg wet							
Endosulfan II	ND	0.0080	mg/Kg wet							
Endosulfan II [2C]	ND	0.0080	mg/Kg wet							
Endosulfan Sulfate	ND	0.0080	mg/Kg wet							
Endosulfan Sulfate [2C]	ND	0.0080	mg/Kg wet							
Endrin	ND	0.0080	mg/Kg wet							
Endrin [2C]	ND	0.0080	mg/Kg wet							
Endrin Aldehyde	ND	0.0080	mg/Kg wet							
Endrin Aldehyde [2C]	ND	0.0080	mg/Kg wet							
Endrin Ketone	ND	0.0080	mg/Kg wet							
Endrin Ketone [2C]	ND	0.0080	mg/Kg wet							
Heptachlor	ND	0.0050	mg/Kg wet							
Heptachlor [2C]	ND	0.0050	mg/Kg wet							
Heptachlor Epoxide	ND	0.0050	mg/Kg wet							
Heptachlor Epoxide [2C]	ND	0.0050	mg/Kg wet							
Hexachlorobenzene	ND	0.0060	mg/Kg wet							
Hexachlorobenzene [2C]	ND	0.0060	mg/Kg wet							
Methoxychlor	ND	0.050	mg/Kg wet							
Methoxychlor [2C]	ND	0.050	mg/Kg wet							
Toxaphene	ND	0.10	mg/Kg wet							
Toxaphene [2C]	ND	0.10	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.156	mg/Kg wet	0.200		77.8	30-150				
Surrogate: Decachlorobiphenyl [2C]	0.144	mg/Kg wet	0.200		71.9	30-150				
Surrogate: Tetrachloro-m-xylene	0.133	mg/Kg wet	0.200		66.5	30-150				
Surrogate: Tetrachloro-m-xylene [2C]	0.127	mg/Kg wet	0.200		63.7	30-150				

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
Batch B308354 - SW-846 3546										
LCS (B308354-BS1)										
Prepared: 05/13/22 Analyzed: 05/18/22										
Aldrin	0.091	0.0050	mg/Kg wet	0.100		90.8	40-140			
Aldrin [2C]	0.081	0.0050	mg/Kg wet	0.100		81.0	40-140			
alpha-BHC	0.091	0.0050	mg/Kg wet	0.100		90.6	40-140			
alpha-BHC [2C]	0.072	0.0050	mg/Kg wet	0.100		72.3	40-140			
beta-BHC	0.087	0.0050	mg/Kg wet	0.100		86.8	40-140			
beta-BHC [2C]	0.080	0.0050	mg/Kg wet	0.100		79.5	40-140			
delta-BHC	0.089	0.0050	mg/Kg wet	0.100		89.4	40-140			
delta-BHC [2C]	0.081	0.0050	mg/Kg wet	0.100		80.8	40-140			
gamma-BHC (Lindane)	0.091	0.0020	mg/Kg wet	0.100		90.7	40-140			
gamma-BHC (Lindane) [2C]	0.076	0.0020	mg/Kg wet	0.100		76.3	40-140			
4,4'-DDD	0.096	0.0040	mg/Kg wet	0.100		96.0	40-140			
4,4'-DDD [2C]	0.092	0.0040	mg/Kg wet	0.100		91.7	40-140			
4,4'-DDE	0.095	0.0040	mg/Kg wet	0.100		95.5	40-140			
4,4'-DDE [2C]	0.090	0.0040	mg/Kg wet	0.100		90.0	40-140			
4,4'-DDT	0.094	0.0040	mg/Kg wet	0.100		93.5	40-140			
4,4'-DDT [2C]	0.087	0.0040	mg/Kg wet	0.100		86.8	40-140			
Dieldrin	0.092	0.0040	mg/Kg wet	0.100		91.6	40-140			
Dieldrin [2C]	0.088	0.0040	mg/Kg wet	0.100		87.5	40-140			
Endosulfan I	0.088	0.0050	mg/Kg wet	0.100		87.9	40-140			
Endosulfan I [2C]	0.078	0.0050	mg/Kg wet	0.100		77.5	40-140			
Endosulfan II	0.085	0.0080	mg/Kg wet	0.100		84.8	40-140			
Endosulfan II [2C]	0.082	0.0080	mg/Kg wet	0.100		82.2	40-140			
Endosulfan Sulfate	0.073	0.0080	mg/Kg wet	0.100		73.1	40-140			
Endosulfan Sulfate [2C]	0.075	0.0080	mg/Kg wet	0.100		75.3	40-140			
Endrin	0.086	0.0080	mg/Kg wet	0.100		86.5	40-140			
Endrin [2C]	0.086	0.0080	mg/Kg wet	0.100		86.0	40-140			
Endrin Ketone	0.088	0.0080	mg/Kg wet	0.100		88.4	40-140			
Endrin Ketone [2C]	0.081	0.0080	mg/Kg wet	0.100		81.2	40-140			
Heptachlor	0.094	0.0050	mg/Kg wet	0.100		94.1	40-140			
Heptachlor [2C]	0.079	0.0050	mg/Kg wet	0.100		78.7	40-140			
Heptachlor Epoxide	0.089	0.0050	mg/Kg wet	0.100		88.8	40-140			
Heptachlor Epoxide [2C]	0.082	0.0050	mg/Kg wet	0.100		81.9	40-140			
Hexachlorobenzene	0.084	0.0060	mg/Kg wet	0.100		84.4	40-140			
Hexachlorobenzene [2C]	0.073	0.0060	mg/Kg wet	0.100		73.3	40-140			
Methoxychlor	0.082	0.050	mg/Kg wet	0.100		82.0	40-140			
Methoxychlor [2C]	0.081	0.050	mg/Kg wet	0.100		81.2	40-140			
Surrogate: Decachlorobiphenyl	0.150		mg/Kg wet	0.200		75.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.123		mg/Kg wet	0.200		61.3	30-150			
Surrogate: Tetrachloro-m-xylene	0.154		mg/Kg wet	0.200		77.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.122		mg/Kg wet	0.200		60.9	30-150			
LCS Dup (B308354-BSD1)										
Prepared: 05/13/22 Analyzed: 05/18/22										
Aldrin	0.082	0.0050	mg/Kg wet	0.100		82.2	40-140	9.95	30	
Aldrin [2C]	0.081	0.0050	mg/Kg wet	0.100		81.2	40-140	0.268	30	
alpha-BHC	0.078	0.0050	mg/Kg wet	0.100		78.1	40-140	14.8	30	
alpha-BHC [2C]	0.075	0.0050	mg/Kg wet	0.100		74.6	40-140	3.11	30	
beta-BHC	0.079	0.0050	mg/Kg wet	0.100		78.5	40-140	9.99	30	
beta-BHC [2C]	0.079	0.0050	mg/Kg wet	0.100		78.7	40-140	1.08	30	
gamma-BHC	0.081	0.0050	mg/Kg wet	0.100		81.2	40-140	9.66	30	
gamma-BHC [2C]	0.079	0.0050	mg/Kg wet	0.100		79.2	40-140	1.94	30	
gamma-BHC (Lindane)	0.079	0.0020	mg/Kg wet	0.100		79.4	40-140	13.3	30	
gamma-BHC (Lindane) [2C]	0.078	0.0020	mg/Kg wet	0.100		77.8	40-140	1.83	30	



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B308354 - SW-846 3546										
LCS Dup (B308354-BSD1)										
Prepared: 05/13/22 Analyzed: 05/18/22										
4,4'-DDD	0.092	0.0040	mg/Kg wet	0.100	91.9	40-140	4.35	30		
4,4'-DDD [2C]	0.088	0.0040	mg/Kg wet	0.100	87.7	40-140	4.46	30		
4,4'-DDE	0.091	0.0040	mg/Kg wet	0.100	91.1	40-140	4.65	30		
4,4'-DDE [2C]	0.086	0.0040	mg/Kg wet	0.100	86.2	40-140	4.31	30		
4,4'-DDT	0.088	0.0040	mg/Kg wet	0.100	88.3	40-140	5.70	30		
4,4'-DDT [2C]	0.082	0.0040	mg/Kg wet	0.100	81.6	40-140	6.23	30		
Dieldrin	0.086	0.0040	mg/Kg wet	0.100	86.4	40-140	5.80	30		
Dieldrin [2C]	0.083	0.0040	mg/Kg wet	0.100	83.5	40-140	4.71	30		
Endosulfan I	0.082	0.0050	mg/Kg wet	0.100	82.5	40-140	6.40	30		
Endosulfan I [2C]	0.077	0.0050	mg/Kg wet	0.100	77.3	40-140	0.324	30		
Endosulfan II	0.080	0.0080	mg/Kg wet	0.100	80.5	40-140	5.20	30		
Endosulfan II [2C]	0.078	0.0080	mg/Kg wet	0.100	78.1	40-140	5.07	30		
Endosulfan Sulfate	0.067	0.0080	mg/Kg wet	0.100	67.5	40-140	8.03	30		
Endosulfan Sulfate [2C]	0.070	0.0080	mg/Kg wet	0.100	70.0	40-140	7.35	30		
Endrin	0.083	0.0080	mg/Kg wet	0.100	82.5	40-140	4.70	30		
Endrin [2C]	0.082	0.0080	mg/Kg wet	0.100	81.7	40-140	5.12	30		
Endrin Ketone	0.085	0.0080	mg/Kg wet	0.100	84.6	40-140	4.42	30		
Endrin Ketone [2C]	0.077	0.0080	mg/Kg wet	0.100	77.1	40-140	5.25	30		
Heptachlor	0.083	0.0050	mg/Kg wet	0.100	83.4	40-140	12.0	30		
Heptachlor [2C]	0.079	0.0050	mg/Kg wet	0.100	79.3	40-140	0.799	30		
Heptachlor Epoxide	0.082	0.0050	mg/Kg wet	0.100	82.1	40-140	7.86	30		
Heptachlor Epoxide [2C]	0.079	0.0050	mg/Kg wet	0.100	79.3	40-140	3.23	30		
Hexachlorobenzene	0.077	0.0060	mg/Kg wet	0.100	76.8	40-140	9.43	30		
Hexachlorobenzene [2C]	0.076	0.0060	mg/Kg wet	0.100	76.1	40-140	3.73	30		
Methoxychlor	0.077	0.050	mg/Kg wet	0.100	77.2	40-140	5.93	30		
Methoxychlor [2C]	0.077	0.050	mg/Kg wet	0.100	76.7	40-140	5.68	30		
Surrogate: Decachlorobiphenyl	0.143		mg/Kg wet	0.200	71.6	30-150				
Surrogate: Decachlorobiphenyl [2C]	0.121		mg/Kg wet	0.200	60.4	30-150				
Surrogate: Tetrachloro-m-xylene	0.136		mg/Kg wet	0.200	68.2	30-150				
Surrogate: Tetrachloro-m-xylene [2C]	0.129		mg/Kg wet	0.200	64.4	30-150				

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B308353 - SW-846 3546

Blank (B308353-BLK1)	Prepared: 05/13/22 Analyzed: 05/17/22								
-----------------------------	---------------------------------------	--	--	--	--	--	--	--	--

Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.194		mg/Kg wet	0.200		97.1	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.193		mg/Kg wet	0.200		96.3	30-150			
Surrogate: Tetrachloro-m-xylene	0.159		mg/Kg wet	0.200		79.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.141		mg/Kg wet	0.200		70.5	30-150			

LCS (B308353-BS1)	Prepared: 05/13/22 Analyzed: 05/17/22								
--------------------------	---------------------------------------	--	--	--	--	--	--	--	--

Aroclor-1016	0.15	0.020	mg/Kg wet	0.200		73.4	40-140			
Aroclor-1016 [2C]	0.15	0.020	mg/Kg wet	0.200		75.4	40-140			
Aroclor-1260	0.16	0.020	mg/Kg wet	0.200		81.8	40-140			
Aroclor-1260 [2C]	0.16	0.020	mg/Kg wet	0.200		80.2	40-140			
Surrogate: Decachlorobiphenyl	0.196		mg/Kg wet	0.200		98.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.195		mg/Kg wet	0.200		97.5	30-150			
Surrogate: Tetrachloro-m-xylene	0.166		mg/Kg wet	0.200		82.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.148		mg/Kg wet	0.200		74.1	30-150			

LCS Dup (B308353-BSD1)	Prepared: 05/13/22 Analyzed: 05/17/22								
-------------------------------	---------------------------------------	--	--	--	--	--	--	--	--

Aroclor-1016	0.15	0.020	mg/Kg wet	0.200		73.9	40-140	0.797	30	
Aroclor-1016 [2C]	0.15	0.020	mg/Kg wet	0.200		76.0	40-140	0.847	30	
Aroclor-1260	0.17	0.020	mg/Kg wet	0.200		83.2	40-140	1.70	30	
Aroclor-1260 [2C]	0.16	0.020	mg/Kg wet	0.200		82.1	40-140	2.41	30	
Surrogate: Decachlorobiphenyl	0.195		mg/Kg wet	0.200		97.3	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.195		mg/Kg wet	0.200		97.5	30-150			
Surrogate: Tetrachloro-m-xylene	0.163		mg/Kg wet	0.200		81.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.147		mg/Kg wet	0.200		73.5	30-150			



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B309280 - SW-846 8151

Blank (B309280-BLK1)		Prepared: 05/25/22 Analyzed: 05/29/22				
2,4-D	ND	24	µg/kg wet			
2,4-D [2C]	ND	24	µg/kg wet			
2,4-DB	ND	24	µg/kg wet			
2,4-DB [2C]	ND	24	µg/kg wet			
2,4,5-TP (Silvex)	ND	2.4	µg/kg wet			
2,4,5-TP (Silvex) [2C]	ND	2.4	µg/kg wet			
2,4,5-T	ND	2.4	µg/kg wet			
2,4,5-T [2C]	ND	2.4	µg/kg wet			
Dalapon	ND	60	µg/kg wet			
Dalapon [2C]	ND	60	µg/kg wet			
Dicamba	ND	2.4	µg/kg wet			
Dicamba [2C]	ND	2.4	µg/kg wet			
Dichloroprop	ND	24	µg/kg wet			
Dichloroprop [2C]	ND	24	µg/kg wet			
MCPA	ND	2400	µg/kg wet			
MCPA [2C]	ND	2400	µg/kg wet			
MCPP	ND	2400	µg/kg wet			
MCPP [2C]	ND	2400	µg/kg wet			V-06
Surrogate: 2,4-Dichlorophenylacetic acid	64.0		µg/kg wet	95.2	67.2	30-150
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	64.1		µg/kg wet	95.2	67.3	30-150

LCS (B309280-BS1)		Prepared: 05/25/22 Analyzed: 05/29/22				
2,4-D	95.0	25	µg/kg wet	125	76.0	40-140
2,4-D [2C]	102	25	µg/kg wet	125	81.2	40-140
2,4-DB	73.9	25	µg/kg wet	125	59.1	40-140
2,4-DB [2C]	73.7	25	µg/kg wet	125	58.9	40-140
2,4,5-TP (Silvex)	9.50	2.5	µg/kg wet	12.5	76.0	40-140
2,4,5-TP (Silvex) [2C]	10.3	2.5	µg/kg wet	12.5	82.8	40-140
2,4,5-T	9.04	2.5	µg/kg wet	12.5	72.3	40-140
2,4,5-T [2C]	9.49	2.5	µg/kg wet	12.5	75.9	40-140
Dalapon	149	62	µg/kg wet	312	47.6	40-140
Dalapon [2C]	148	62	µg/kg wet	312	47.5	40-140
Dicamba	9.12	2.5	µg/kg wet	12.5	72.9	40-140
Dicamba [2C]	9.86	2.5	µg/kg wet	12.5	78.9	40-140
Dichloroprop	100	25	µg/kg wet	125	80.2	40-140
Dichloroprop [2C]	103	25	µg/kg wet	125	82.4	40-140
MCPA	10800	2500	µg/kg wet	12500	86.2	40-140
MCPA [2C]	9010	2500	µg/kg wet	12500	72.1	40-140
MCPP	13000	2500	µg/kg wet	12500	104	40-140
MCPP [2C]	9770	2500	µg/kg wet	12500	78.1	40-140
Surrogate: 2,4-Dichlorophenylacetic acid	70.7		µg/kg wet	100	70.7	30-150
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	73.4		µg/kg wet	100	73.4	30-150

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
Batch B309280 - SW-846 8151										
LCS Dup (B309280-BSD1)										
Prepared: 05/25/22 Analyzed: 05/29/22										
2,4-D	95.8	25	µg/kg wet	125	76.6	40-140	0.837	30		
2,4-D [2C]	103	25	µg/kg wet	125	82.2	40-140	1.21	30		
2,4-DB	73.5	25	µg/kg wet	125	58.8	40-140	0.615	30		
2,4-DB [2C]	74.7	25	µg/kg wet	125	59.8	40-140	1.41	30		
2,4,5-TP (Silvex)	9.42	2.5	µg/kg wet	12.5	75.4	40-140	0.864	30		
2,4,5-TP (Silvex) [2C]	10.4	2.5	µg/kg wet	12.5	83.4	40-140	0.806	30		
2,4,5-T	8.96	2.5	µg/kg wet	12.5	71.7	40-140	0.842	30		
2,4,5-T [2C]	9.59	2.5	µg/kg wet	12.5	76.8	40-140	1.14	30		
Dalapon	149	62	µg/kg wet	312	47.8	40-140	0.288	30		
Dalapon [2C]	149	62	µg/kg wet	312	47.7	40-140	0.427	30		
Dicamba	9.75	2.5	µg/kg wet	12.5	78.0	40-140	6.66	30		
Dicamba [2C]	9.97	2.5	µg/kg wet	12.5	79.7	40-140	1.09	30		
Dichloroprop	101	25	µg/kg wet	125	80.9	40-140	0.908	30		
Dichloroprop [2C]	104	25	µg/kg wet	125	83.4	40-140	1.20	30		
MCPA	10800	2500	µg/kg wet	12500	86.4	40-140	0.225	30		
MCPA [2C]	9110	2500	µg/kg wet	12500	72.9	40-140	1.11	30		
MCPP	13300	2500	µg/kg wet	12500	106	40-140	1.59	30	V-06	
MCPP [2C]	9870	2500	µg/kg wet	12500	78.9	40-140	0.995	30		
Surrogate: 2,4-Dichlorophenylacetic acid	71.3		µg/kg wet	100	71.3	30-150				
Surrogate: 2,4-Dichlorophenylacetic acid	74.1		µg/kg wet	100	74.1	30-150				
]										

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-------------

Batch B308525 - SW-846 3546

Blank (B308525-BLK1)									
TPH (C9-C36)	ND	8.3	mg/Kg wet	Prepared: 05/16/22 Analyzed: 05/18/22					
Surrogate: 2-Fluorobiphenyl	2.50		mg/Kg wet	3.33	74.9	40-140			
LCS (B308525-BS1)									
TPH (C9-C36)	24.2	8.3	mg/Kg wet	33.3	72.7	40-140			
Surrogate: 2-Fluorobiphenyl	2.22		mg/Kg wet	3.33	66.6	40-140			
LCS Dup (B308525-BSD1)									
TPH (C9-C36)	26.6	8.3	mg/Kg wet	33.3	79.8	40-140	9.25	30	
Surrogate: 2-Fluorobiphenyl	2.41		mg/Kg wet	3.33	72.2	40-140			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	-----------	-------------	---------	-----------	-------

Batch B308621 - SW-846 3050B

Blank (B308621-BLK1)	Prepared: 05/17/22 Analyzed: 05/24/22									
Antimony	ND	1.7	mg/Kg wet							
Arsenic	ND	3.3	mg/Kg wet							
Barium	ND	1.7	mg/Kg wet							
Beryllium	ND	0.17	mg/Kg wet							
Cadmium	ND	0.33	mg/Kg wet							
Chromium	ND	0.66	mg/Kg wet							
Lead	ND	0.50	mg/Kg wet							
Nickel	ND	0.66	mg/Kg wet							
Selenium	ND	3.3	mg/Kg wet							
Silver	ND	0.33	mg/Kg wet							
Thallium	ND	1.7	mg/Kg wet							
Vanadium	ND	0.66	mg/Kg wet							
Zinc	ND	0.66	mg/Kg wet							

LCS (B308621-BS1)	Prepared: 05/17/22 Analyzed: 05/24/22									
Antimony	85.7	4.9	mg/Kg wet	99.5		86.1	2.5-209			
Arsenic	141	9.8	mg/Kg wet	140		101	82.9-117.9			
Barium	212	4.9	mg/Kg wet	202		105	81.2-118.3			
Beryllium	45.6	0.49	mg/Kg wet	42.6		107	81-119			
Cadmium	95.5	0.98	mg/Kg wet	97.9		97.6	80-119.5			
Chromium	59.0	2.0	mg/Kg wet	60.4		97.6	80.3-119.7			
Lead	57.7	1.5	mg/Kg wet	56.7		102	82.9-116.9			
Nickel	153	2.0	mg/Kg wet	151		101	79.5-121.2			
Selenium	37.4	9.8	mg/Kg wet	35.5		105	77.5-122.3			
Silver	21.4	0.98	mg/Kg wet	20.4		105	79.4-121.1			
Thallium	71.8	4.9	mg/Kg wet	69.3		104	79.4-120.6			
Vanadium	45.3	2.0	mg/Kg wet	44.9		101	78-121.8			
Zinc	182	2.0	mg/Kg wet	186		98.0	79-121			

LCS Dup (B308621-BSD1)	Prepared: 05/17/22 Analyzed: 05/24/22									
Antimony	91.0	5.0	mg/Kg wet	99.5		91.5	2.5-209	6.02	30	
Arsenic	144	10	mg/Kg wet	140		103	82.9-117.9	1.83	30	
Barium	215	5.0	mg/Kg wet	202		107	81.2-118.3	1.69	20	
Beryllium	46.5	0.50	mg/Kg wet	42.6		109	81-119	2.06	30	
Cadmium	99.4	1.0	mg/Kg wet	97.9		101	80-119.5	3.96	20	
Chromium	61.6	2.0	mg/Kg wet	60.4		102	80.3-119.7	4.39	30	
Lead	58.6	1.5	mg/Kg wet	56.7		103	82.9-116.9	1.58	30	
Nickel	155	2.0	mg/Kg wet	151		102	79.5-121.2	1.10	30	
Selenium	38.9	10	mg/Kg wet	35.5		109	77.5-122.3	3.75	30	
Silver	22.1	1.0	mg/Kg wet	20.4		108	79.4-121.1	3.16	30	
Thallium	75.5	5.0	mg/Kg wet	69.3		109	79.4-120.6	5.01	30	
Vanadium	47.2	2.0	mg/Kg wet	44.9		105	78-121.8	4.12	30	
Zinc	183	2.0	mg/Kg wet	186		98.4	79-121	0.384	30	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B308621 - SW-846 3050B										
Reference (B308621-SRM1) MRL Check										
Lead 0.640 0.50 mg/Kg wet 0.498 129 * 80-120 M-10										
Batch B309067 - SW-846 7471										
Blank (B309067-BLK1) Prepared & Analyzed: 05/23/22										
Mercury ND 0.025 mg/Kg wet										
LCS (B309067-BS1) Prepared & Analyzed: 05/23/22										
Mercury 14.4 0.73 mg/Kg wet 16.5 87.5 74.5-124.8										
LCS Dup (B309067-BSD1) Prepared & Analyzed: 05/23/22										
Mercury 14.8 0.74 mg/Kg wet 16.5 89.9 74.5-124.8 2.70 20										

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Notes
Batch B308341 - SW-846 9045C								
LCS (B308341-BS1)								
pH	5.98		pH Units	6.00		99.6	90-110	
LCS (B308341-BS2)								
pH	5.98		pH Units	6.00		99.7	90-110	
Batch B308429 - SM21-23 2510B Modified								
Blank (B308429-BLK1)								
Specific conductance	ND	2.0	μmhos/cm					
LCS (B308429-BS1)								
Specific conductance	140		μmhos/cm	137		104	90-122	
Duplicate (B308429-DUP1)								
Specific conductance	11	2.0	μmhos/cm		9.7		14.3	41.4
Batch B308563 - SW-846 9030A								
Blank (B308563-BLK1)								
Reactive Sulfide	ND	2.0	mg/Kg					
LCS (B308563-BS1)								
Reactive Sulfide	12	2.0	mg/Kg	10.0		116	75.7-125	
Batch B308564 - SW-846 9014								
Blank (B308564-BLK1)								
Reactive Cyanide	ND	0.40	mg/Kg					
LCS (B308564-BS1)								
Reactive Cyanide	9.5	0.40	mg/Kg	10.0		95.4	81.2-113	
Batch B308571 - SW-846 1010A-B								
Blank (B308571-BLK1)								
Flashpoint	> 212 °F		°F					
LCS (B308571-BS1)								
Flashpoint	81		°F	81.0		99.9	98.8-101	



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B308571 - SW-846 1010A-B

LCS Dup (B308571-BSD1)					Prepared & Analyzed: 05/17/22					
Flashpoint	81		°F	81.0		99.9	98.8-101	0.00	5	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

BREAKDOWN REPORT

Lab Sample ID: S071717-PEM1 Analyzed: 05/17/2022

Column Number: 1

Analyte	% Breakdown
4,4'-DDT [1]	10.34
Endrin [1]	9.07

Column Number: 2

Analyte	% Breakdown
4,4'-DDT [2]	9.14
Endrin [2]	8.48

BREAKDOWN REPORT

Lab Sample ID: S071717-PEM2 Analyzed: 05/17/2022

Column Number: 1

Analyte	% Breakdown
4,4'-DDT [1]	9.87
Endrin [1]	8.21

Column Number: 2

Analyte	% Breakdown
4,4'-DDT [2]	8.94
Endrin [2]	8.13

BREAKDOWN REPORT

Lab Sample ID: S071717-PEM3 Analyzed: 05/18/2022

Column Number: 1

Analyte	% Breakdown
4,4'-DDT [1]	8.54
Endrin [1]	9.91

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

BREAKDOWN REPORT

Lab Sample ID:	S071717-PEM3	Analyzed:	05/18/2022
Column Number:	2		
Analyte		% Breakdown	
4,4'-DDT [2]		7.76	
Endrin [2]		9.87	

BREAKDOWN REPORT

Lab Sample ID:	S071717-PEM4	Analyzed:	05/18/2022
Column Number:	1		
Analyte		% Breakdown	
4,4'-DDT [1]		8.33	
Endrin [1]		9.25	
Column Number:		2	
Analyte		% Breakdown	
4,4'-DDT [2]		7.59	
Endrin [2]		9.54	

BREAKDOWN REPORT

Lab Sample ID:	S071717-PEM5	Analyzed:	05/18/2022
Column Number:	1		
Analyte		% Breakdown	
4,4'-DDT [1]		7.27	
Endrin [1]		9.94	
Column Number:		2	
Analyte		% Breakdown	
4,4'-DDT [2]		6.53	
Endrin [2]		9.61	

BREAKDOWN REPORT

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

BREAKDOWN REPORT

Lab Sample ID: S071799-PEM1 Analyzed: 05/22/2022

Column Number: 1

Analyte	% Breakdown
4,4'-DDT [1]	2.02
Endrin [1]	1.49

Column Number: 2

Analyte	% Breakdown
4,4'-DDT [2]	1.65
Endrin [2]	2.06

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**
Comp #1 (2-10ft)
SW-846 8081B

 Lab Sample ID: 22E0834-01 Date(s) Analyzed: 05/22/2022 05/22/2022

 Instrument ID (1): ECD6A Instrument ID (2): ECD6B

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	7.181	0.000	0.000	28	
	2	7.190	0.000	0.000	34	15.9
4,4'-DDE	1	6.742	0.000	0.000	3.2	
	2	6.763	0.000	0.000	2.7	16.9
4,4'-DDT	1	7.392	0.000	0.000	1400	
	2	7.427	0.000	0.000	1400	0.0
Dieldrin	1	6.957	0.000	0.000	7.8	
	2	6.867	0.000	0.000	7.1	9.4

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES****LCS****SW-846 8082A**Lab Sample ID: B308353-BS1 Date(s) Analyzed: 05/17/2022 05/17/2022Instrument ID (1): ECD1 Instrument ID (2): ECD1

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.15	
	2	0.000	0.000	0.000	0.15	0.0
Aroclor-1260	1	0.000	0.000	0.000	0.16	
	2	0.000	0.000	0.000	0.16	0.0

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**
SW-846 8082A**LCS Dup**

Lab Sample ID: B308353-BSD1 Date(s) Analyzed: 05/17/2022 05/17/2022
Instrument ID (1): ECD1 Instrument ID (2): ECD1
GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.15	
	2	0.000	0.000	0.000	0.15	0.0
Aroclor-1260	1	0.000	0.000	0.000	0.17	
	2	0.000	0.000	0.000	0.16	6.1

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

SW-846 8081B

LCS

 Lab Sample ID: B308354-BS1 Date(s) Analyzed: 05/18/2022 05/18/2022

 Instrument ID (1): ECD2 Instrument ID (2): ECD2

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	7.764	0.000	0.000	0.096	
	2	7.543	0.000	0.000	0.092	4.3
4,4'-DDE	1	7.298	0.000	0.000	0.095	
	2	7.100	0.000	0.000	0.090	6.5
4,4'-DDT	1	7.978	0.000	0.000	0.094	
	2	7.784	0.000	0.000	0.087	7.7
Aldrin	1	6.608	0.000	0.000	0.091	
	2	6.331	0.000	0.000	0.081	11.6
alpha-BHC	1	5.828	0.000	0.000	0.091	
	2	5.597	0.000	0.000	0.072	23.3
beta-BHC	1	6.105	0.000	0.000	0.087	
	2	5.887	0.000	0.000	0.080	8.4
delta-BHC	1	6.235	0.000	0.000	0.089	
	2	6.086	0.000	0.000	0.081	9.4
Dieldrin	1	7.545	0.000	0.000	0.092	
	2	7.220	0.000	0.000	0.088	4.4
Endosulfan I	1	7.362	0.000	0.000	0.088	
	2	7.014	0.000	0.000	0.078	12.0
Endosulfan II	1	7.903	0.000	0.000	0.085	
	2	7.624	0.000	0.000	0.082	3.6
Endosulfan Sulfate	1	8.494	0.000	0.000	0.073	
	2	8.083	0.000	0.000	0.075	2.7
Endrin	1	7.729	0.000	0.000	0.086	
	2	7.452	0.000	0.000	0.086	1.2
Endrin Ketone	1	8.668	0.000	0.000	0.088	
	2	8.445	0.000	0.000	0.081	8.3
gamma-BHC (Lindane)	1	6.048	0.000	0.000	0.091	
	2	5.824	0.000	0.000	0.076	18.0
Heptachlor	1	6.387	0.000	0.000	0.094	
	2	6.110	0.000	0.000	0.079	17.3
Heptachlor Epoxide	1	7.059	0.000	0.000	0.089	



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**
SW-846 8081B

LCS

Lab Sample ID: B308354-BS1 Date(s) Analyzed: 05/18/2022 05/18/2022Instrument ID (1): ECD2 Instrument ID (2): ECD2

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
	2	6.731	0.000	0.000	0.082	8.2
Hexachlorobenzene	1	5.710	0.000	0.000	0.084	
	2	5.509	0.000	0.000	0.073	14.0
Methoxychlor	1	8.309	0.000	0.000	0.082	
	2	8.301	0.000	0.000	0.081	1.2

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

LCS Dup

SW-846 8081B

Lab Sample ID: B308354-BSD1 Date(s) Analyzed: 05/18/2022 05/18/2022
Instrument ID (1): ECD2 Instrument ID (2): ECD2
GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	7.765	0.000	0.000	0.092	
	2	7.544	0.000	0.000	0.088	4.4
4,4'-DDE	1	7.299	0.000	0.000	0.091	
	2	7.101	0.000	0.000	0.086	5.7
4,4'-DDT	1	7.980	0.000	0.000	0.088	
	2	7.785	0.000	0.000	0.082	7.1
Aldrin	1	6.609	0.000	0.000	0.082	
	2	6.331	0.000	0.000	0.081	1.2
alpha-BHC	1	5.828	0.000	0.000	0.078	
	2	5.597	0.000	0.000	0.075	3.9
beta-BHC	1	6.106	0.000	0.000	0.079	
	2	5.887	0.000	0.000	0.079	0.0
delta-BHC	1	6.235	0.000	0.000	0.081	
	2	6.086	0.000	0.000	0.079	2.5
Dieldrin	1	7.547	0.000	0.000	0.086	
	2	7.221	0.000	0.000	0.083	3.6
Endosulfan I	1	7.363	0.000	0.000	0.082	
	2	7.015	0.000	0.000	0.077	7.5
Endosulfan II	1	7.904	0.000	0.000	0.080	
	2	7.625	0.000	0.000	0.078	3.8
Endosulfan Sulfate	1	8.495	0.000	0.000	0.067	
	2	8.084	0.000	0.000	0.070	2.9
Endrin	1	7.730	0.000	0.000	0.083	
	2	7.453	0.000	0.000	0.082	1.2
Endrin Ketone	1	8.669	0.000	0.000	0.085	
	2	8.446	0.000	0.000	0.077	9.9
gamma-BHC (Lindane)	1	6.048	0.000	0.000	0.079	
	2	5.825	0.000	0.000	0.078	1.3
Heptachlor	1	6.388	0.000	0.000	0.083	
	2	6.110	0.000	0.000	0.079	4.9
Heptachlor Epoxide	1	7.060	0.000	0.000	0.082	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES****LCS Dup****SW-846 8081B**

Lab Sample ID: B308354-BSD1 Date(s) Analyzed: 05/18/2022 05/18/2022
Instrument ID (1): ECD2 Instrument ID (2): ECD2
GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
	2	6.731	0.000	0.000	0.079	3.7
Hexachlorobenzene	1	5.711	0.000	0.000	0.077	
	2	5.509	0.000	0.000	0.076	1.3
Methoxychlor	1	8.310	0.000	0.000	0.077	
	2	8.301	0.000	0.000	0.077	0.0

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

SW-846 8151A

LCS

 Lab Sample ID: B309280-BS1 Date(s) Analyzed: 05/29/2022 05/29/2022

 Instrument ID (1): ECD 8 Instrument ID (2): ECD 8

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
2,4,5-T	1	17.286	0.000	0.000	9.04	
	2	17.126	0.000	0.000	9.49	5.3
2,4,5-TP (Silvex)	1	17.057	0.000	0.000	9.50	
	2	16.745	0.000	0.000	10.3	8.1
2,4-D	1	15.583	0.000	0.000	95.0	
	2	15.013	0.000	0.000	102	7.1
2,4-DB	1	17.644	0.000	0.000	73.9	
	2	17.478	0.000	0.000	73.7	0.4
Dalapon	1	5.455	0.000	0.000	149	
	2	4.915	0.000	0.000	148	1.3
Dicamba	1	13.332	0.000	0.000	9.12	
	2	12.688	0.000	0.000	9.86	8.0
Dichloroprop	1	15.049	0.000	0.000	100	
	2	14.303	0.000	0.000	103	3.0
MCPA	1	14.195	0.000	0.000	10800	
	2	13.562	0.000	0.000	9010	19.9
MCPP	1	13.840	0.000	0.000	13000	
	2	13.033	0.000	0.000	9770	28.4

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

SW-846 8151A

LCS Dup

 Lab Sample ID: B309280-BSD1 Date(s) Analyzed: 05/29/2022 05/29/2022

 Instrument ID (1): ECD 8 Instrument ID (2): ECD 8

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
2,4,5-T	1	17.286	0.000	0.000	8.96	
	2	17.126	0.000	0.000	9.59	6.4
2,4,5-TP (Silvex)	1	17.057	0.000	0.000	9.42	
	2	16.745	0.000	0.000	10.4	10.1
2,4-D	1	15.583	0.000	0.000	95.8	
	2	15.012	0.000	0.000	103	7.0
2,4-DB	1	17.644	0.000	0.000	73.5	
	2	17.479	0.000	0.000	74.7	0.9
Dalapon	1	5.455	0.000	0.000	149	
	2	4.916	0.000	0.000	149	0.7
Dicamba	1	13.332	0.000	0.000	9.75	
	2	12.688	0.000	0.000	9.97	1.7
Dichloroprop	1	15.048	0.000	0.000	101	
	2	14.303	0.000	0.000	104	3.9
MCPA	1	14.195	0.000	0.000	10800	
	2	13.562	0.000	0.000	9110	18.8
MCPP	1	13.841	0.000	0.000	13300	
	2	13.033	0.000	0.000	9870	27.4

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

FLAG/QUALIFIER SUMMARY

- * QC result is outside of established limits.
- † Wide recovery limits established for difficult compound.
- ‡ Wide RPD limits established for difficult compound.
- # Data exceeded client recommended or regulatory level
- ND Not Detected
- RL Reporting Limit is at the level of quantitation (LOQ)
- DL Detection Limit is the lower limit of detection determined by the MDL study
- MCL Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

J Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

M-10 The reporting limit verification for the AIHA lead program is outside of control limits for this element. Any reported result at or near the detection limit may be biased on the high side.

O-32 A dilution was performed as part of the standard analytical procedure.

R-05 Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

RL-11 Elevated reporting limit due to high concentration of target compounds.

S-01 The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

S-12 Surrogate recovery is outside of control limits on confirmatory column, but within control limits on primary column. Data validation is not affected.

S-17 Surrogate recovery is outside of control limits. Data validation is not affected since all associated results are less than the reporting limit and bias is on the high side.

V-05 Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

V-06 Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.

V-16 Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.

V-34 Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

V-36 Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332
CERTIFICATIONS**Certified Analyses included in this Report**

Analyst	Certifications
<i>SW-846 1010A-B in Soil</i>	
Flashpoint	NY,NC,ME,VA
<i>SW-846 6010D in Soil</i>	
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,NC
Barium	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,AIHA,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,ME,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
<i>SW-846 7471B in Soil</i>	
Mercury	CT,NH,NY,NC,ME,VA
<i>SW-846 8081B in Soil</i>	
Aldrin	CT,NC,NH,NY,ME,VA
Aldrin [2C]	CT,NC,NH,NY,ME,VA
alpha-BHC	CT,NC,NH,NY,ME,VA
alpha-BHC [2C]	CT,NC,NH,NY,ME,VA
beta-BHC	CT,NC,NH,NY,ME,VA
beta-BHC [2C]	CT,NC,NH,NY,ME,VA
delta-BHC	CT,NC,NH,NY,ME,VA
delta-BHC [2C]	CT,NC,NH,NY,ME,VA
gamma-BHC (Lindane)	CT,NC,NH,NY,ME,VA
gamma-BHC (Lindane) [2C]	CT,NC,NH,NY,ME,VA
Chlordane	CT,NC,NH,NY,ME,VA
Chlordane [2C]	CT,NC,NH,NY,ME,VA
4,4'-DDD	CT,NC,NH,NY,ME,VA
4,4'-DDD [2C]	CT,NC,NH,NY,ME,VA
4,4'-DDE	CT,NC,NH,NY,ME,VA
4,4'-DDE [2C]	CT,NC,NH,NY,ME,VA
4,4'-DDT	CT,NC,NH,NY,ME,VA
4,4'-DDT [2C]	CT,NC,NH,NY,ME,VA
Dieldrin	CT,NC,NH,NY,ME,VA
Dieldrin [2C]	CT,NC,NH,NY,ME,VA
Endosulfan I	CT,NC,NH,NY,ME,VA
Endosulfan I [2C]	CT,NC,NH,NY,ME,VA
Endosulfan II	CT,NC,NH,NY,ME,VA
Endosulfan II [2C]	CT,NC,NH,NY,ME,VA
Endosulfan Sulfate	CT,NC,NH,NY,ME,VA
Endosulfan Sulfate [2C]	CT,NC,NH,NY,ME,VA
Endrin	CT,NC,NH,NY,ME,VA
Endrin [2C]	CT,NC,NH,NY,ME,VA

 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8081B in Soil</i>	
Endrin Ketone	NC
Endrin Ketone [2C]	NC
Heptachlor	CT,NC,NH,NY,ME,VA
Heptachlor [2C]	CT,NC,NH,NY,ME,VA
Heptachlor Epoxide	CT,NC,NH,NY,ME,VA
Heptachlor Epoxide [2C]	CT,NC,NH,NY,ME,VA
Hexachlorobenzene	NC
Hexachlorobenzene [2C]	NC
Methoxychlor	CT,NC,NH,NY,ME,VA
Methoxychlor [2C]	CT,NC,NH,NY,ME,VA
<i>SW-846 8081B in Water</i>	
Aldrin	CT,NC,NH,NY,ME,VA
Aldrin [2C]	CT,NC,NH,NY,ME,VA
alpha-BHC	CT,NC,NH,NY,ME,VA
alpha-BHC [2C]	CT,NC,NH,NY,ME,VA
beta-BHC	CT,NC,NH,NY,ME,VA
beta-BHC [2C]	CT,NC,NH,NY,ME,VA
delta-BHC	CT,NC,NH,NY,ME,VA
delta-BHC [2C]	CT,NC,NH,NY,ME,VA
gamma-BHC (Lindane)	CT,NC,NH,NY,ME,VA
gamma-BHC (Lindane) [2C]	CT,NC,NH,NY,ME,VA
Chlordane	CT,NC,NH,NY,ME,VA
Chlordane [2C]	CT,NC,NH,NY,ME,VA
4,4'-DDD	CT,NC,NH,NY,ME,VA
4,4'-DDD [2C]	CT,NC,NH,NY,ME,VA
4,4'-DDE	CT,NC,NH,NY,ME,VA
4,4'-DDE [2C]	CT,NC,NH,NY,ME,VA
4,4'-DDT	CT,NC,NH,NY,ME,VA
4,4'-DDT [2C]	CT,NC,NH,NY,ME,VA
Dieldrin	CT,NC,NH,NY,ME,VA
Dieldrin [2C]	CT,NC,NH,NY,ME,VA
Endosulfan I	CT,NC,NH,NY,ME,VA
Endosulfan I [2C]	CT,NC,NH,NY,ME,VA
Endosulfan II	CT,NC,NH,NY,ME,VA
Endosulfan II [2C]	CT,NC,NH,NY,ME,VA
Endosulfan Sulfate	CT,NC,NH,NY,ME,VA
Endosulfan Sulfate [2C]	CT,NC,NH,NY,ME,VA
Endrin	CT,NC,NH,NY,ME,VA
Endrin [2C]	CT,NC,NH,NY,ME,VA
Endrin Ketone	NC
Endrin Ketone [2C]	NC
Heptachlor	CT,NC,NH,NY,ME,VA
Heptachlor [2C]	CT,NC,NH,NY,ME,VA
Heptachlor Epoxide	CT,NC,NH,NY,ME,VA
Heptachlor Epoxide [2C]	CT,NC,NH,NY,ME,VA
Hexachlorobenzene	NC

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8081B in Water</i>	
Hexachlorobenzene [2C]	NC
Methoxychlor	CT,NC,NH,NY,ME,VA
Methoxychlor [2C]	CT,NC,NH,NY,ME,VA
<i>SW-846 8082A in Soil</i>	
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1262	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1268	NH,NY,NC,ME,VA,PA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA
<i>SW-846 8082A in Water</i>	
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1262	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1268	NH,NY,NC,ME,VA,PA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA
<i>SW-846 8151A in Soil</i>	
2,4-D	NY,ME,NC,NH,VA,CT
2,4-D [2C]	NY,ME,NC,NH,VA,CT
2,4-DB	NY,ME,NC,NH,VA,CT
2,4-DB [2C]	NY,ME,NC,NH,VA,CT

 39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8151A in Soil</i>	
2,4,5-TP (Silvex)	NY,ME,NC,NH,VA,CT
2,4,5-TP (Silvex) [2C]	NY,ME,NC,NH,VA,CT
2,4,5-T	NY,ME,NC,NH,VA,CT
2,4,5-T [2C]	NY,ME,NC,NH,VA,CT
Dalapon	NY,ME,NC,NH,VA,CT
Dalapon [2C]	NY,ME,NC,NH,VA,CT
Dicamba	NY,ME,NC,NH,VA,CT
Dicamba [2C]	NY,ME,NC,NH,VA,CT
Dichloroprop	NY,ME,NC,NH,VA,CT
Dichloroprop [2C]	NY,ME,NC,NH,VA,CT
MCPA	NY,ME,NC,NH,VA,CT
MCPA [2C]	NY,ME,NC,NH,VA,CT
MCPP	NY,ME,NC,NH,VA,CT
MCPP [2C]	NY,ME,NC,NH,VA,CT
<i>SW-846 8151A in Water</i>	
2,4-D	ME,NC,NH,CT,NY,VA
2,4-D [2C]	ME,NC,NH,CT,NY,VA
2,4-DB	ME,NC,NH,CT,NY,VA
2,4-DB [2C]	ME,NC,NH,CT,NY,VA
2,4,5-TP (Silvex)	ME,NC,NH,CT,NY,VA
2,4,5-TP (Silvex) [2C]	ME,NC,NH,CT,NY,VA
2,4,5-T	ME,NC,NH,CT,NY,VA
2,4,5-T [2C]	ME,NC,NH,CT,NY,VA
Dalapon	ME,NC,NH,CT,NY,VA
Dalapon [2C]	ME,NC,NH,CT,NY,VA
Dicamba	ME,NC,NH,CT,NY,VA
Dicamba [2C]	ME,NC,NH,CT,NY,VA
Dichloroprop	ME,NC,NH,CT,NY,VA
Dichloroprop [2C]	ME,NC,NH,CT,NY,VA
MCPA	NC,CT
MCPA [2C]	NC,CT
MCPP	NC,CT
MCPP [2C]	NC,CT
<i>SW-846 8260D in Soil</i>	
Acetone	CT,NH,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	NH,NY,ME
Bromochloromethane	NH,NY,ME
Bromodichloromethane	CT,NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	CT,NH,NY,ME
sec-Butylbenzene	CT,NH,NY,ME
tert-Butylbenzene	CT,NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8260D in Soil</i>	
Carbon Tetrachloride	CT,NH,NY,ME
Chlorobenzene	CT,NH,NY,ME
Chlorodibromomethane	CT,NH,NY,ME
Chloroethane	CT,NH,NY,ME
Chloroform	CT,NH,NY,ME
Chloromethane	CT,NH,NY,ME
2-Chlorotoluene	CT,NH,NY,ME
4-Chlorotoluene	CT,NH,NY,ME
1,2-Dibromo-3-chloropropane (DBCP)	NY
1,2-Dibromoethane (EDB)	NY
Dibromomethane	NH,NY,ME
1,2-Dichlorobenzene	CT,NH,NY,ME
1,3-Dichlorobenzene	CT,NH,NY,ME
1,4-Dichlorobenzene	CT,NH,NY,ME
Dichlorodifluoromethane (Freon 12)	NY,ME
1,1-Dichloroethane	CT,NH,NY,ME
1,2-Dichloroethane	CT,NH,NY,ME
1,1-Dichloroethylene	CT,NH,NY,ME
cis-1,2-Dichloroethylene	CT,NH,NY,ME
trans-1,2-Dichloroethylene	CT,NH,NY,ME
1,2-Dichloropropane	CT,NH,NY,ME
1,3-Dichloropropane	NH,NY,ME
2,2-Dichloropropane	NH,NY,ME
1,1-Dichloropropene	NH,NY,ME
cis-1,3-Dichloropropene	CT,NH,NY,ME
trans-1,3-Dichloropropene	CT,NH,NY,ME
1,4-Dioxane	NY
Ethylbenzene	CT,NH,NY,ME
Hexachlorobutadiene	NH,NY,ME
2-Hexanone (MBK)	CT,NH,NY,ME
Isopropylbenzene (Cumene)	CT,NH,NY,ME
p-Isopropyltoluene (p-Cymene)	NY
Methyl tert-Butyl Ether (MTBE)	NY
Methylene Chloride	CT,NH,NY,ME
4-Methyl-2-pentanone (MIBK)	CT,NH,NY
Naphthalene	NH,NY,ME
n-Propylbenzene	NY
Styrene	CT,NH,NY,ME
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME
Tetrachloroethylene	CT,NH,NY,ME
Toluene	CT,NH,NY,ME
1,2,3-Trichlorobenzene	NY
1,2,4-Trichlorobenzene	NH,NY,ME
1,1,1-Trichloroethane	CT,NH,NY,ME
1,1,2-Trichloroethane	CT,NH,NY,ME
Trichloroethylene	CT,NH,NY,ME

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS
Certified Analyses included in this Report

Analyst	Certifications
<i>SW-846 8260D in Soil</i>	
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME
1,2,3-Trichloropropane	NH,NY,ME
1,2,4-Trimethylbenzene	CT,NH,NY,ME
1,3,5-Trimethylbenzene	CT,NH,NY,ME
Vinyl Chloride	CT,NH,NY,ME
m+p Xylene	CT,NH,NY,ME
o-Xylene	CT,NH,NY,ME
<i>SW-846 8270E in Soil</i>	
Acenaphthene	CT,NY,NH
Acenaphthylene	CT,NY,NH
Acetophenone	NY,NH
Aniline	NY,NH
Anthracene	CT,NY,NH
Benzo(a)anthracene	CT,NY,NH
Benzo(a)pyrene	CT,NY,NH
Benzo(b)fluoranthene	CT,NY,NH
Benzo(g,h,i)perylene	CT,NY,NH
Benzo(k)fluoranthene	CT,NY,NH
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH
2-Chloronaphthalene	CT,NY,NH
2-Chlorophenol	CT,NY,NH
Chrysene	CT,NY,NH
Dibenz(a,h)anthracene	CT,NY,NH
Dibenzofuran	CT,NY,NH
Di-n-butylphthalate	CT,NY,NH
1,2-Dichlorobenzene	NY,NH
1,3-Dichlorobenzene	NY,NH
1,4-Dichlorobenzene	NY,NH
3,3-Dichlorobenzidine	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH
Dimethylphthalate	CT,NY,NH
2,4-Dinitrophenol	CT,NY,NH
2,4-Dinitrotoluene	CT,NY,NH
2,6-Dinitrotoluene	CT,NY,NH
Di-n-octylphthalate	CT,NY,NH
1,2-Diphenylhydrazine/Azobenzene	NY,NH
Fluoranthene	CT,NY,NH
Fluorene	NY,NH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270E in Soil	
Hexachlorobenzene	CT,NY,NH
Hexachlorobutadiene	CT,NY,NH
Hexachloroethane	CT,NY,NH
Indeno(1,2,3-cd)pyrene	CT,NY,NH
Isophorone	CT,NY,NH
2-Methylnaphthalene	CT,NY,NH
2-Methylphenol	CT,NY,NH
3/4-Methylphenol	CT,NY,NH
Naphthalene	CT,NY,NH
Nitrobenzene	CT,NY,NH
2-Nitrophenol	CT,NY,NH
4-Nitrophenol	CT,NY,NH
Pentachlorophenol	CT,NY,NH
Phenanthrene	CT,NY,NH
Phenol	CT,NY,NH
Pyrene	CT,NY,NH
1,2,4-Trichlorobenzene	CT,NY,NH
2,4,5-Trichlorophenol	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Public Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

22E 0834

Pace Analytical®

Phone: 413-525-2332
Fax: 413-525-6405

Access COC's and Support Requests

Company Name: CDW CONSULTANTS
 Address: 4 CALIFORNIA DR FRAMINGHAM
 Phone: 508-875-2657
 Project Name: LOCATION
 Project Location: 240 BEAUM ST WATERTOWN
 Project Number: 1830.1
 Project Manager: D. Smith
 Pace Quote Name/Number:
 Invoice Recipient:
 Sampled By: A. Smith

<http://www.pacelabs.com>

Doc # 381 Rev 5_07/13/2021

Page 1 of 1

CHAIN OF CUSTODY RECORD						ANALYSIS REQUESTED					
Requested Turnaround Time			Dissolved Metals Sample								
7-Day <input checked="" type="checkbox"/> 10-Day <input type="checkbox"/> PFAS 10-Day (std) <input type="checkbox"/> Due Date:			<input type="radio"/> Field Filtered <input type="radio"/> Lab to Filter								
Rush Approval Required			Orthophosphate Samples								
1-Day <input type="checkbox"/> 3-Day <input type="checkbox"/> 2-Day <input type="checkbox"/> 4-Day <input type="checkbox"/>			<input type="radio"/> Field Filtered <input type="radio"/> Lab to Filter								
Data Delivery											
Format: PDF <input checked="" type="checkbox"/> EXCEL <input checked="" type="checkbox"/> Other:						PCB ONLY					
CLP Like Data Pkg Required: <input type="checkbox"/>						SOXHLET <input type="checkbox"/>					
Email To: agm@pacelabs.com Fax To #: 508-875-2657						NON SOXHLET <input type="checkbox"/>					
Sample ID	Client Sample ID/Description	Beginning Date/Time	Ending Date/Time	COMPAGNA	MATRIX	Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE
1	CWP II (2-m) Slurry 12 ⁰⁰			CWP	S	U	X	X	X	X	X
2	CWP 3 - 5 (4-C) Slurry 12 ⁰⁰			CWP	S	U	X	X	X	X	X
Relinquished by: (signature)	Date/Time:	Client Comments: / Tel + if det R+L extended									
	5/12/22										
Received by: (signature)	Date/Time:										
	5/12/22 10:00										
Relinquished by: (signature)	Date/Time:	Detection Limit Requirements									
	5/12/22 10:00	MA									
Received by: (signature)	Date/Time:	Special Requirements									
	5/12/22 10:00	MA MCP Required									
Relinquished by: (signature)	Date/Time:	MCP Certification Form Required									
	5/12/22	CT RCP Required									
Received by: (signature)	Date/Time:	RCP Certification Form Required									
	5/12/22 10:00	MA State DW Required									
Relinquished by: (signature)	Date/Time:	Project Entity									
	5/12/22	Government <input type="checkbox"/> Municipality <input type="checkbox"/> Federal <input type="checkbox"/> 21 J <input type="checkbox"/> City <input type="checkbox"/> Brownfield <input type="checkbox"/> MBTA <input type="checkbox"/>									
Received by: (signature)	Date/Time:	Other <input type="checkbox"/> Chromatogram <input type="checkbox"/> AIHA-LAP, LLC									
Comments:											
Disclaimer: Pace Analytical is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Pace Analytical values your partnership on each project and will try to assist with missing information, but will not be held accountable.											

² Preservation Code
Courier Use Only
Total Number Of:
VIALS _____
GLASS _____
PLASTIC _____
BACTERIA _____
ENCORE _____

Glassware in the fridge? Y / N

Glassware in freezer? Y / N

Prepackaged Cooler? Y / N

Pace Analytical is not responsible for missing samples from prepacked coolers

¹ Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

¹ Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid

S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

I Have Not Confirmed Sample Container
Numbers With Lab Staff Before Relinquishing
Over Samples _____

Pace

Doc# 277 Rev 5 2017

Pace

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False
Statement will be brought to the attention of the Client - State True or False

Client	<i>CDW</i>	Received By	<i>DR</i>	Date	<i>5/12/22</i>	Time	<i>1810</i>	
How were the samples received?	In Cooler	<i>7</i>	No Cooler		On Ice	<i>7</i>	No Ice	
	Direct from Sampling				Ambient		Melted Ice	
Were samples within Temperature? 2-6°C	<i>7</i>	By Gun #	<i>5</i>	Actual Temp -	<i>3.7</i>			
Was Custody Seal Intact?	<i>NA</i>	By Blank #		Actual Temp -				
Was COC Relinquished ?	<i>7</i>			Were Samples Tampered with?				
Are there broken/leaking/loose caps on any samples?				Does Chain Agree With Samples?				
Is COC in ink/ Legible?	<i>7</i>			<i>F</i>				
Did COC include all pertinent Information?	Client Project	<i>7</i>	Analysis ID's	<i>7</i>	Sampler Name	<i>7</i>	Collection Dates/Times	<i>7</i>
Are Sample labels filled out and legible?								
Are there Lab to Filters?	<i>F</i>							
Are there Rushes?	<i>F</i>							
Are there Short Holds?	<i>7</i>							
Is there enough Volume?	<i>7</i>							
Is there Headspace where applicable?	<i>7</i>							
Proper Media/Containers Used?	<i>7</i>							
Were trip blanks received?	<i>F</i>							
Do all samples have the proper pH?	<i>NA</i>	Acid		Base				

Medium	Container	1 Liter Amb.	1 Liter Plastic	16 oz Amb.
Unp-				
HCL-		500 mL Amb.	500 mL Plastic	8oz Amb/Clear
Meoh-	<i>1</i>	250 mL Amb.	250 mL Plastic	4oz Amb/Clear
Bisulfate-	<i>2</i>	Flashpoint	Col./Bacteria	2oz Amb/Clear
DI-		Other Glass	Other Plastic	Encore
Thiosulfate-		SOC Kit	Plastic Bag	
Sulfuric-		Perchlorate	Ziplock	Frozen:

Unused Media

Medium	Container	1 Liter Amb.	1 Liter Plastic	16 oz Amb.
Unp-				
HCL-		500 mL Amb.	500 mL Plastic	8oz Amb/Clear
Meoh-		250 mL Amb.	250 mL Plastic	4oz Amb/Clear
Bisulfate-		Col./Bacteria	Flashpoint	2oz Amb/Clear
DI-		Other Plastic	Other Glass	Encore
Thiosulfate-		SOC Kit	Plastic Bag	
Sulfuric-		Perchlorate	Ziplock	Frozen:

Comments:

MADEP MCP Analytical Method Report Certification Form

Laboratory Name:	Con-Test, a Pace Analytical Laboratory		Project #:	22E0834	
Project Location:	240 Beaver St., Waltham, MA		RTN:		
This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)] 22E0834-01 thru 22E0834-02					
Matrices: Soil					
CAM Protocol (check all that below)					
8260 VOC CAM II A (X)	7470/7471 Hg CAM III B (X)	MassDEP VPH (GC/PID/FID) CAM IV A ()	8082 PCB CAM V A (X)	9014 Total Cyanide/PAC CAM VI A ()	6860 Perchlorate CAM VIII B ()
8270 SVOC CAM II B (X)	7010 Metals CAM III C ()	MassDEP VPH (GC/MS) CAM IV C ()	8081 Pesticides CAM V B (X)	7196 Hex Cr CAM VI B ()	MassDEP APH CAM IX A ()
6010 Metals CAM III A (X)	6020 Metals CAM III D ()	MassDEP EPH CAM IV B ()	8151 Herbicides CAM V C (X)	8330 Explosives CAM VIII A ()	TO-15 VOC CAM IX B ()
<i>Affirmative response to Questions A through F is required for "Presumptive Certainty" status</i>					
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).			<input type="checkbox"/> Yes	<input type="checkbox"/> No ¹
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?			<input type="checkbox"/> Yes	<input type="checkbox"/> No ¹
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Questions A through E)?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
<i>A response to questions G, H and I below is required for "Presumptive Certainty" status</i>					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ¹
<i>Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.</i>					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.					
<i>I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.</i>					
Signature:			Position:	Laboratory Director	
Printed Name:	Tod E. Kopyscinski		Date:	05/30/22	